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PLANNING ASSISTANCE FOR THE TOWN OF HAMBURG, COUNTY OF ERIE, NE--ETC(U)  
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# Planning Assistance For The Town of Hamburg, County of Erie, New York

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## HOOVER BEACH

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management goals for the future. Current federal policies do not authorize the use of Federal funds to provide erosion control measures on private property. The study was to determine if any current Corps of Engineers authority applies to the problems of Hoover Beach.

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## AUTHORITY

This planning assistance report was prepared by the Buffalo District, U. S. Army Corps of Engineers, under the authority of Section 206 of the 1960 Flood Control Act, as amended. The report was initiated at the request of the town of Hamburg and the county of Erie, NY.

## OBJECTIVES

The purpose of this report is to provide planning assistance to officials of both the county of Erie and the town of Hamburg by identifying and evaluating flood and erosion damage reduction measures which will meet their respective goals. The report provides information which can be used in the present situation, as well as in developing sound flood plain and coastal zone management goals for the future. A further objective is to determine if there is a Federal interest in implementing any of the recommended alternatives.

Current Federal policies do not authorize the use of Federal funds to provide erosion control measures on private property. This study was undertaken to determine if any current Corps of Engineers authority applies to the problems of Hoover Beach.

## BACKGROUND

The Hoover Beach area is located on the south shore of Lake Erie about 4.5 miles south of Buffalo, NY, in the town of Hamburg (see Plate 1). The land between Hoover Road and the lake is owned by the Hoover Beach Corporation, a landowners' association. The homeowners lease the land from the corporation on 99-year lease agreements. There are about 100 homes on the Hoover Beach tract ranging from beach cottages to contemporary style homes in the \$30,000 to \$70,000 price range. The development originally consisted of beach cottages on lots rented from a local farmer, Mr. Hoover. The land was purchased from Mr. Hoover's estate in the mid-1950's, and the corporation was formed. The current development started at that time.

The tract has been divided into three areas by the residents for purposes of identification; the South Shore (Plate 2), Mid Shore (Plate 3), and North Shore (Plate 4) areas. The total length of the tract from north to south is about 2,840 feet. The South Shore and Mid Shore areas are separated by a small unnamed stream which drains a portion of the town of Hamburg.

The shoreline through the Hoover Beach area is composed of a low, erodible bluff, ranging from about 10 to 20 feet in height. A shale outcropping rises above the beach at about the center of the Mid Shore area and reaches a peak of about 20 feet above the beach in the North Shore area. The exact point at which the shale appears above the beach is not readily identifiable because of the various shore protection structures which have been constructed along the bluff.

North Shore area, residents have constructed vertical concrete walls on top of the shale outcropping upwards to the top of the bluff. The walls are generally higher than those in Mid Shore and South Shore areas.

In the Mid Shore area, flooding occurs from a combination of wave overtopping and poor internal drainage. Homes adjacent to the lake experience heavy damages from overtopping waves, while houses further inland are inundated by the runoff of overtopped waves and water backup from the stream.

The protective structures are lower than in the North Shore area and more susceptible to overtopping. All of the protective structures are vertical concrete walls, and they are not uniform in either height or alignment. A visual inspection of the area between Mid Shore Drive and Hoover Road indicates that the natural drainage of the area has been severely disrupted. It appears that water drains north to a small ditch at the rear of 138 Mid Shore Drive. The ditch runs east to a culvert pipe (12-inch diameter +) which runs south along Hoover Road to the unnamed stream. The culvert pipe is intermittent and passes under several driveways before entering the stream. The pipe is in a state of disrepair and is completely blocked at one point by a piece of wood. Residents have built up driveways across this low-lying area, creating swale areas which restrict overland flow into the storm drainage system.

This low-lying area of the Mid Shore section also experiences stream flooding from spring runoff. This problem is generally created by windrowed ice on the lake which restricts the discharge of the stream. The extent of damage from this type of flooding has not been documented.

In the South Shore area, no overland flooding damages were reported. However, many homes were damaged by overtopping waves, and concrete seawalls were heavily damaged by wave attack.

In all the areas, there is a lack of uniform protection in terms of height and alignment which detracts from effectiveness.

Buffalo District records on Hoover Beach date back to 1972. Field inspections and technical assistance were provided on several occasions following severe storms. The area was considered for emergency protection from lake flooding during Operation Foresight in 1972-73. It was determined that the problems at Hoover Beach were primarily erosion rather than flood-related and, therefore, not eligible for assistance at that time. Erosion of private property was not eligible under that authority.

#### CURRENT SITUATION

Most of the lakefront properties at Hoover Beach are protected by some type of protective structure. The recent period of high water (1972-1979) on Lake Erie has resulted in a more frequent occurrence of storm damage at Hoover Beach. The 50-year open-coast flood level in this reach is 580.4 feet, U. S. Coast and Geodetic Survey Datum (USC&GS). The design wave analysis for a 5-year frequency storm superimposed on the 50-year flood level indicates that the maximum deep water wave is about 14.5 feet. This would



generate an 8.9-foot breaking wave at the protective structures. Based on this analysis, the most effective shore protection structure would be a rubblemound revetment having a top elevation of 588.9 feet msl and having 1 foot vertical on 2-1/2-foot horizontal side slope to prevent overtopping under all conditions. The sloping lakeward face of the structure absorbs a large portion of the wave energy. The vertical seawall does not absorb wave energy and, therefore, requires greater height to prevent overtopping. Table 1 summarizes the maximum and minimum top elevations of the existing structures at each area of Hoover Beach.

### Table 1 - Heights of Existing Structures

Area	Minimum Height ft. (USC&GS)	Maximum Height ft. (USC&GS)
South Shore	582.1	586.8
Mid Shore	582.4	585.6
North Shore	587.8	593.4

Table 2 indicates all periods of high water which registered +9.0 feet or more, low water datum (LWD), on the gage at Buffalo, NY since the beginning of recent development at Hoover Beach.

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Table 2 - Instantaneous Readings in Excess of +9.0 Feet L.W.D. -  
Gage at Buffalo, NY - 1950-1979

Date	Feet (USC&GS)	Height Above Low Water Datum (LWD)
3 Mar 54	579.03	9.40
22 Mar 55	578.09	9.00
3 Nov 55	580.03	10.40
16 Feb 67	579.09	9.19
27 Oct 67	579.19	9.29
25 Jan 72	579.02	9.12
14 Nov 74	579.41	9.51
10 Nov 75	580.14	10.24
1 Dec 77	579.32	9.42
2 Dec 77	579.22	9.32
9 Dec 77	579.46	9.56
18 Nov 78	579.56	9.66
4 Dec 78	579.17	9.27
6 Apr 79	580.51	10.61

#### DAMAGES

Damages at Hoover Beach are caused by various interrelated factors, such as ice, wind velocity, wind direction, lake levels, and rainfall. During the April 1979 storm, houses in the South Shore and the south portion of the Mid Shore areas were heavily damaged by wind-driven waves and ice, while in the north portion of Mid Shore and in the North Shore areas the windrowed ice piled up against the shore and prevented wind-driven waves from reaching the shoreline. Consequently, no damages were reported in the North Shore area because of the natural elevation there in April 1979.

It is estimated that during the April 1979 storm, the protective structures in the South Shore and Mid Shore were overtopped by 12 to 16 feet of water. Since some of the houses are within 15 feet of the structures, these overtopping waves run up and break directly against the houses. The waves carried chunks of lake ice and debris into the buildings, smashing windows and doors and causing extensive structural damage.

Water from the overtopping waves drained off into the stream and the low-lying areas of Mid Shore, inundating homes. A high water mark on a house in the Mid Shore area indicated a flood height of 582.2 (USC&GS).

A major problem throughout the Hoover Beach area is that homes are built too close to the edge of the lake bluff. During periods of low or average lake levels, there is a relatively wide beach which dissipates the wave energy before the wave reaches the bluff. Conversely, during periods of high lake levels, a larger wave reaches the bluff and the protective structures and the wave energy is dissipated there, causing erosion or structural damage.

Since 1972, the level of Lake Erie has been "high", reaching a record height in 1973. The problem is compounded within areas where short-term fluctuations in lake levels are caused by strong winds which drive the surface waters toward the leeward end of the lake. Hoover Beach is located within such an area. This type of fluctuation has a very pronounced effect on the eastern end of Lake Erie because it is the shallowest of the Great Lakes and affords the least opportunity for return currents beneath the water surface to offset the buildup caused by the wind-driven surface currents.

Most of the existing protection at Hoover Beach consists of vertical-faced concrete walls with top elevations of about 12-15 feet above Low Water Datum (LWD).

The wave damage problem at South Shore and Mid Shore exists primarily because the existing shore protection is unable to provide total protection during a significant instantaneous lake level rise. The problem is aggravated by the vertical walls and the lack of uniform protection. Large waves strike the vertical walls, transmitting some of their energy downward, causing scour at the toe of the walls undermining the structures, and some of the energy upward, throwing water high into the air further aggravating the overtopping problem. The scouring also allows higher waves to reach the walls. In addition, since each property owner has constructed his protection to suit his personal needs and resources, often without adequately addressing the needs of his neighbor, pockets and gaps and irregularities have been created in the protection which permit overtopping waves easier access to some properties. Another drawback to vertical walls is that they are highly susceptible to failure due to inadequate design or poor construction methods, and they have a tendency to fail completely, eliminating all protection.

The recommended solution is to construct a wave-absorbing, rubblemound toe or berm in front of the walls or to replace the vertical walls with a sloping rubblemound revetment which will dissipate the wave energy. This can be demonstrated at the homes on the south end of the South Shore area where residents used stone riprap provided by the New York State Department of Transportation to construct stone revetments after the November 1975 storm. While these stone revetments are not constructed at the recommended slope or crest height, they minimized the effects of the April 1979 storm to a much greater degree than the vertical walls.

The town of Hamburg made damage surveys of the Hoover Beach area after both the November 1975 and the April 1979 storms. Based on these surveys, the damages were estimated at about \$430,000 for the November 1975 event and

\$1,456,000 for the April 1979 event. Field survey by Buffalo District personnel indicate that damages from the April 1979 storm were about \$600,000. Damages from an earlier storm in January 1973 were also reported in the amount of \$225,000. Based on these figures, the average homeowner at Hoover Beach sustained in excess of \$12,500 damage from lake storms from January 1973 through April 1979.

#### ALTERNATIVE DAMAGE REDUCTION MEASURES

As previously discussed, the water resources problems at Hoover Beach are threefold, each requiring a different solution.

- a. Flooding of low-lying areas from wave overtopping and/or stream backup. This problem is primarily limited to the Mid Shore area.
- b. Direct wave damage to houses and structures mainly in the South Shore and Mid Shore areas.
- c. Erosion of the shale bluffs causing undermining of existing shore protection structures in the North Shore area.

#### DESIGN DISCUSSION

The problem of bluff recession in the North Shore area is not considered a critical problem and will not be discussed further except to point out that the practice of building concrete walls partway up the bluff is not recommended. Bluff recession can be retarded in the long run only by protecting the base of the bluff from wave attack.

The flood problems in the Mid Shore area are primarily caused by an inadequate storm drainage system and ill-advised filling of low-lying areas by residents. These problems can be significantly reduced and possibly eliminated by improvements to the storm drainage system. Providing adequate storm drainage for developed areas is a responsibility of the local government. The Corps can provide limited technical assistance and suggestions on local drainage problems, but design of an adequate storm drainage system is not within current Corps authorities unless required as part of an authorized flood control project and then the Federal cost is limited to those portions of the storm drainage system required to carry runoff in excess of the 10-year frequency storm.

The wave damage problems throughout the Hoover Beach area are caused by the proximity of houses to the edge of the bluff, and the insufficient height, configuration, and alignment of the existing protective structures. Alternative solutions to the wave damage problems include increasing the height of protective structures, adding a wave energy dissipating rubblemound toe to the existing walls, and providing some uniformity of protection across the entire lake frontage of the Hoover Beach area. The most effective alternative would be to remove all existing walls and construct a sloping rubblemound revetment along the entire length of Hoover Beach to dissipate the wave energy. However, this alternative would be extremely costly and probably unacceptable to the residents. Installation of energy-absorbing structures would also reduce flooding in the Mid Shore area during lake storms by reducing or eliminating the overtopping waves.

## DESIGN CRITERIA

The shore protection alternatives at Hoover Beach are designed, using a 50-year design instantaneous lake level. An instantaneous lake level reflects the additive influence of a high still water lake level plus a short-term fluctuation caused when a prolonged strong wind condition or a barometric pressure gradient causes the lake surface to oscillate. The design lake level was determined using the "Report on Great Lakes Open-Coast Flood Levels" prepared by the U. S. Army Corps of Engineers for HUD (1977). The elevation of an open-coast flood level at a 50-year return period for Hoover Beach is 580.4 (USC&GS) or +10.5 above Low Water Datum. For comparison, the lake level rose to 580.51 (USC&GS) or 10.6 above LWD on the morning of 6 April 1979 at Buffalo.

A 5-year recurrence, significant deep water wave height at Buffalo, NY, was determined using the Waterways Experiment Station Technical Manuals.

The deep water design wave has a wave height of 14.4 feet and a period of 8.7 seconds and normally comes from the western quadrant. The deep water wave height was corrected for irregular nearshore conditions to determine a maximum wave height at the structure. The use of refraction coefficients is beyond the scope of this study.

## ALTERNATIVE SOLUTIONS

Five alternatives were evaluated for reducing wave runup and overtopping at Hoover Beach. These alternatives are:

- (1) a thin-vertical seawall (of existing type) (see Plate 5).
- (2) a composite seawall consisting of a vertical wall with a stone berm (see Plate 6).
- (3) a rubblemound revetment (see Plate 7).
- (4) an offshore detached breakwater
- (5) permanent evacuation.

Each alternative would either completely or significantly reduce wave damage. The degree of damage is directly related to the proximity of the building to the protective structure and to the height of the wave runup above the structure height (overtopping). Any alternative which does not completely eliminate overtopping must include an internal drainage system to relieve the resultant flood problem behind the structure. Detailed engineering studies would be required to determine the quantities of water which could overtop protective structures in the various alternatives. This information would be required to select the appropriate internal drainage plan, and these detailed studies are beyond the scope of this report.

The crest elevation for an along-shore structure which will eliminate all overtopping varies with the type of structure used. A structure which allows no overtopping would provide optimum flood and wave damage protection but would be extremely massive to counteract the wave forces involved and would restrict the view of the lake and access to the beach. In general, it would also be relatively expensive.

A crest elevation which allows a maximum of 5 feet of overtopping during extreme storm events would significantly reduce physical damage to buildings, and when backed up by an adequately designed internal drainage system, would significantly reduce flood damage. Such a structure would also minimize the disadvantages associated with the zero overtopping structures previously discussed.

Table 3 summarizes the crest elevations required for various degrees of overtopping and various types of protective structures.

Table 3 - Crest Heights of Structures  
Runup and Overtopping Summary

Alternative	Amount of Overtopping			
	0.0'	2.0'	4.0'	5.0'
	ft	ft	ft	ft
1. Vertical Wall	28.5	26.5	24.5	23.5
2. Composite Wall <sup>1/</sup> (interpolated)	24.0	22.0	20.0	19.0
3. Rubblemound Revetment	19.0	17.0	15.0	14.0

<sup>1/</sup> Estimated wave heights.

Note: All heights are height above Low Water Datum (569.9 feet USC&GS).

Based on the information shown in Table 3 and on the existing conditions at Hoover Beach, the most reasonable and the least expensive alternative for the individual homeowner is the composite seawall with a crest elevation of +19.0 feet (see Plate 6). The average homeowner would have to raise the height of his structure from 4 to 6 feet, possibly using gabions and install a stone berm with a crest elevation of +7.0 feet LWD as shown on Plate 6.

The rubblemound revetment provides the greatest degree of protection with the least crest height. However, it is the most expensive alternative and requires a cohesive community effort since all of the shoreline would have to be protected to gain maximum efficiency from this alternative.

Increasing the height of the existing structures using concrete is not recommended. It is doubtful if the foundations of the existing structures are adequate to support the additional load, and the costs are prohibitive. To construct a vertical concrete wall to the crest elevations discussed in this

report requires extensive engineering and design expertise and is generally beyond the capability and resources of the individual. Vertical walls are also not recommended because they accelerate scour at the toe of the wall, are highly susceptible to failure due to inadequate design or construction, and have a tendency to fail completely under stress, eliminating all protection.

A primary consideration in selecting a plan of improvement for shore protection at Hoover Beach is to provide a uniform degree of protection for all homeowners. The present situation, in which some homeowners have little or no protection, only aggravates an intolerable situation. Table 4 summarizes the seawall-revetment alternatives.

Table 4 - Summary of Costs  
Seawall-Revetment Type Structures

Alternative	:Ht. Above :Existing <sup>1/</sup> :Structure	:Ht. Above :LWD	: Degree of :Overtopping	:Cost Per : Lineal Foot <sup>2/</sup>	:Avg. Ht. of : Existing Structure
	: Ft.	: Ft.	: Ft.	: \$	: Ft.
Vertical Seawall	:	:	:	:	:
Gabions *	: 15.0	: 28.5	: 0	: 400	: 13.5
Concrete *	: 15.0	: 28.5	: 0	: 780	: 13.5
Vertical Seawall	:	:	:	:	:
Gabions *	: 10.0	: 23.5	: 5.0	: 215	: 13.5
Concrete *	: 10.0	: 23.5	: 5.0	: 655	: 13.5
Composite Seawall	:	:	:	:	:
Gabions <sup>3/</sup>	: 10.5	: 24.0	: 0	: 415	: 13.5
Concrete*	: 10.5	: 24.0	: 0	: 855	: 13.5
Composite Seawall	:	:	:	:	:
Gabions	: 5.5	: 19.0	: 5.0	: 310	: 13.5
Concrete *	: 5.5	: 19.0	: 5.0	: 350	: 13.5
Rubblemound Revetment:	: 5.5	: 19.0	: 0	: 1,105	: 13.5
Rubblemound Revetment:	: 0.5	: 14.0	: 5.0	: 675	: 13.5

\* Not recommended.

NOTE: Cost for seawall alternatives assume existing structure of about 13.5 feet above LWD. If there is no existing protection, the cost would increase significantly.

<sup>1/</sup> As the strength and stability of each existing wall may vary, it is imperative that the services of a qualified engineer be retained to check these parameters prior to increasing the height of any existing structure.

<sup>2/</sup> Cost includes pinning new concrete wall to old concrete wall.

<sup>3/</sup> Cost of gabion construction can be reduced by up to 50 percent if homeowner installs them himself.

Gabions, rock-filled wire baskets, are recommended for increasing the crest elevation of the existing structures since they can be readily installed by individual homeowners at minimal cost. The wire baskets are available locally, and the cost shown in Table 4 for gabion structures can be reduced by up to 50 percent if the homeowner installs them himself.

It should be noted that the placement of gabions as shown on Plates 9 and 10 may cause instability of the existing wall or possibly structural failure of the wall. As the strength and stability of each wall may vary, it is imperative that the services of a qualified engineer be retained to check these parameters prior to the placement of the gabions.

All of the structures discussed in Table 4 will require periodic maintenance. They should be inspected after each major storm and any damages repaired to insure their structural integrity.

#### OFFSHORE DETACHED BREAKWATERS

The wave runup and overtopping problems at Hoover Beach can be partially relieved by construction of a series of offshore detached breakwaters. About seven 200-foot long segments spaced 300 feet apart would be required to provide the necessary degree of protection. The breakwaters would be located at about the -5 foot LWD contour and have a crest elevation of +11 feet LWD. A sand beach behind the breakwaters would be required to dissipate the waves which should be generated between the breakwaters and the shoreline. The beach would have a berm 30 to 50 feet wide abutting the existing structures, with a crest of +10 feet LWD and about a 1 on 12 front slope. The costs for an offshore detached breakwater alternative are summarized in Table 5. All costs are at November 1979 price levels.

The annual charges for the offshore detached breakwater alternative were computed based on an interest rate of 7-1/8 percent and an estimated economic project life of 50 years. Annual charges for Alternative 4 are summarized in Table 6.

#### SHIP HULL BREAKWATERS

Residents of Hoover Beach have expressed interest in constructing offshore breakwaters using old or surplus ship hulls. Several studies have been undertaken to determine the feasibility of this alternative. In general, the studies have been either unfavorable or inconclusive.

In 1962, two old lake freighters, approximately 485 feet long, were sunk off Gordon Park in Cleveland, OH, to form a small-boat harbor. A trench was excavated in the lake bottom and the hulls were placed in the trench at a depth of about 22 feet. The hulls were filled with stone. Maintenance was expensive, with additional stone and concrete required annually to repair damage from ice and wave attack. Recently, the remaining portions of the ships were incorporated in the dredge disposal dike which was constructed by the Corps of Engineers.



Table 5 - Cost Estimate  
Offshore Detached Breakwaters

Item	Quantity	Unit	Unit Price	Amount
			\$	\$
Bedding Stone	16,000	Ton	14.50	232,000
Core Stone	25,000	Ton	53.00	1,325,000
Armor Stone	36,000	Ton	53.00	1,908,000
Sand	111,200	CY	6.00	667,200
Contractor's Earnings				4,132,200
Contingencies (15% <u>+</u> )				567,800
				4,700,000
Engineering & Design (15% <u>+</u> )				700,000
Supervision & Administration (10% <u>+</u> )				500,000
Total Project Cost				5,900,000

Table 6 - Annual Costs for  
Offshore Detached Breakwaters

Item	Amount
	\$
First Cost	5,900,000
Annual Charges:	
Capital Recovery Factor (0.07361)	434,299
Annual Maintenance	
Structure	80,701
Sand Renourishment	60,000
Total Annual Costs	575,000

While ship hulls are capable of withstanding heavy wave attack while they are afloat, they are not designed to withstand the stress of wave and ice attack when situated in a rigid environment. This is demonstrated by wrecks. A wrecked ship, which protrudes above the lake surface, is soon destroyed by wave action.

A detailed cost estimate for building a surplus-hull breakwater is beyond the scope of this report. However, a preliminary cost estimate is summarized in Table 7. Annual charges are summarized in Table 8.

The following items should be considered in the design of any breakwater constructed of surplus hulls:

- a. Entrench hulls in lake bottom.
- b. Weight the hulls by filling with selected clean stone or other material.
- c. Protect against undermining by placing rock, armor units, or piling around hulls.
- d. Regular maintenance after each major storm.

The surplus hull breakwater should be considered a short-term emergency-type alternative. A single major storm may completely demolish the structure and deposit large quantities of the resultant debris on the shoreline which it is intended to protect.

#### PERMANENT EVACUATION

A discussion of design alternatives for reduction of flood and wave damage at Hoover Beach cannot be considered complete without including permanent evacuation of the shoreline areas. Flood and erosion problems do not exist on the shoreline until a structure is built there. Shoreline recession or erosion is a natural process and is generally uncontrollable. Man can retard erosion, but he cannot stop it. Generally, man's effort to control erosion increases the rate of shoreline change. Homes, especially in the South Shore and Mid Shore areas, could be relocated to vacant areas within the corporation boundaries and the shoreline area converted to a common access recreation area.

The Hoover Beach Corporation would have to reformulate the lease agreements, and the removal of the existing protection structures would be a major problem. However, some of the foundation debris from removing existing structures could be used to provide toe protection for seawalls in the North Shore area, and one or more boat launching ramps could be constructed at minimal expense for the use of the relocated residents.

Costs for moving a house are estimated at between \$5,000 and \$20,000, depending on the size of the house and the distance it would have to be moved. For those houses with basements, the cost would be increased by about \$5,000 for excavation and construction of a new basement. In addition,

Table 7 - Surplus Hull Breakwater

Item	Quantity	Unit	Unit Price	Amount
			\$	\$
Purchase hull and tow to site <u>1/</u>	3	ea.	250,000	750,000
Excavation	23,400	C.Y.	3.50	81,900
Stone Fill	30,000	Ton	25.00	750,000
Toe Stone	9,000	Ton	53.00	<u>477,000</u>
Contractor's Earnings				2,058,900
Contingencies (15% <u>+</u> )				<u>341,100</u>
Total Contractor's Earnings and Contingencies				2,400,000
Engineering & Design (15% <u>+</u> )				360,000
Supervision & Administration (10% <u>+</u> )				<u>240,000</u>
Total Project Cost				3,000,000

1/ Assume 600 foot length stripped hull.

Table 8 - Annual Costs  
Surplus Hull Breakwater

Item	Amount
	\$
First Cost	3,000,000
Annual Charges:	
Capital Recovery Factor (0.07361)	220,830
Maintenance (+4%)	119,170
Total Annual Costs	340,000

it would cost about \$3,000 per house to relocate the utilities. Approximately 35 houses would have to be relocated initially. About 25 percent of these homes have basements.

Town of Hamburg officials advised that a total of about \$30,000 in community development funds have been made available to individual homeowners to help defray the cost of relocating their homes at Hoover Beach. As of this time, none of the homeowners have taken advantage of this assistance.

#### INTERNAL DRAINAGE

The storm drainage system throughout the Hoover Beach area is totally inadequate for the amount of development. The only storm sewers are located along Hoover Road, and they were sized to handle roadway runoff only. In addition, during this investigation all of the catch basins were blocked with storm debris and sediment in varying amounts. Except for an intermittent ditch with no outlet, Mid Shore Drive has no storm drainage facilities. A small storm drain runs along the west side of Hoover Road from Mid Shore Drive to the stream, but the outfall pipe has been deliberately blocked.

A significant reduction in flooding both from stream backup and wave overtopping could be realized by installing an adequate storm sewer system along the roads. The most critical area is along Mid Shore Drive from the stream north to North Shore Drive and along Hoover Road from the stream north to Mid Shore Drive. Where possible, these storm drains should run west to the lake rather than to the stream, since during spring thaw periods, high discharges on the stream can aggravate the drainage problem. Storm sewer outfalls into the stream should be provided with sluice and flapgates, so they can be closed off during flood periods and the storm water pumped from the storm sewer system, either with a lift station or portable pumps. Table 9 summarizes the cost of an internal drainage system for Hoover Beach. Plates 10, 11, 12 show the approximate alignment of the internal drainage plan for each area.

#### DISCUSSION

Flood and erosion problems in the Hoover Beach area are caused by the unrestricted development of the Lake Erie flood plain. The problems are aggravated by the proximity of the houses to the edge of the lake bluff, inadequate shore protection structures, and inadequate storm drainage facilities.

Several plans of improvement were evaluated to reduce flood and erosion problems, including offshore breakwater, vertical and nonvertical seawalls, and permanent evacuation of the lakefront areas.

Table 9 - Cost Estimate - Internal Drainage

Item	Quantity	Unit	Unit Price	Amount
			\$	\$
<u>South Shore Area</u>				
Excavation	880	CY	2.10	1,848
Backfill	620	CY	12.50	7,750
18" CMP	2,000	LF	9.40	18,800
6' Precast Manholes	3	Ea	640	1,920
4' Precast Catch Basins	20	Ea	305	6,100
36" Manhole Frame and Cover	3	Ea	355	1,065
24" Square Catch Basin Frame and Cover	20	Ea	200	<u>4,000</u>
Contractor's Earnings				41,483
Contingencies (15% <u>+</u> )				<u>6,517</u>
Total Contractor's Earnings and Contingencies				48,000
Engineering, Design, Supervision, etc. (25% <u>+</u> )				<u>12,000</u>
Total South Shore				60,000
<u>Mid Shore Area</u>				
Excavation	660	CY	2.10	1,386
Backfill	465	CY	12.50	5,813
18" CMP	1,500	LF	9.40	14,100
Manholes	3	Ea	640	1,920
Frames and Covers	3	Ea	355	1,065
Catch Basins	15	Ea	305	4,575
Frames and Covers	15	Ea	200	<u>3,000</u>
Contractor's Earnings				31,859

Table 9 - Cost Estimate - Internal Drainage (Cont'd)

Item	Quantity	Unit	Unit Price	Amount
			\$	\$
Contingencies (15% <u>+</u> )				<u>5,141</u>
Total Contractor's Earnings and Contingencies				37,000
Engineering, Design, Supervision, etc. (25% <u>+</u> )				<u>11,000</u>
				48,000
<u>North Shore Area</u>				
Excavation	880	CY	2.10	1,848
Backfill	620	CY	12.50	7,750
18" CMP	2,000	LF	9.40	18,800
Manholes	3	Ea	640	1,920
Frames and Covers	3	Ea	355	1,065
Catch Basins	20	Ea	305	6,100
Frames and Covers	20	Ea	200	<u>4,000</u>
Contractor's Earnings				41,483
Contingencies (15% <u>+</u> )				<u>6,517</u>
Contractor's Earnings and Contingencies				48,000
Engineering, Design, Supervision, etc. (25% <u>+</u> )				<u>12,000</u>
Total North Shore				60,000
<u>Total Project Cost</u>				<u>168,000</u>

The least costly short-term solution involves converting the existing shore protection structures to a composite seawall configuration by increasing the height of the existing structures with gabions and adding a stone berm to the lakeward toe as shown on Plate 6. This alternative would reduce damages by dissipating the wave energy and reducing the height of the over-topping wave.

The exact extent of flooding from the unnamed stream which flows through Hoover Beach was not identified. Field surveys and damage interviews with residents indicate that the problem is limited to the interior of the Mid Shore area. While some overland flows do occur during spring thaw periods, the most serious flood damages occur during lake storms when over-topping waves inundate the low-lying area. The existing storm drainage system is totally inadequate and unmaintained. An adequate storm drainage system can be installed for about \$168,000. This system, along with improved shore protection structures, will provide a significant reduction in flood damages both from spring runoff and lake storms.

This investigation has found no evidence of problems which are eligible for Federal assistance under any current Corps of Engineers construction authorities. Erosion control on private property is the property owner's responsibility. Local storm drainage is a responsibility of local government. Hoover Beach residents were advised of the inadequacy of vertical seawalls by Corps personnel many times in the past 9 years, both individually and collectively. Those residents who attempted to follow Corps advice on protection structure design survived the April 1979 storm with much less damage than those who did not.

The Federal interest in projects to protect against hurricane, abnormal tidal, and Great Lakes flood damage is not explicitly defined by legislation. Congressional authorization for Corps construction of such projects, on a case-by-case basis, has essentially established the Federal concern. Great Lakes flooding is defined as flooding which results from storm-induced inundation superimposed on the ordinary cyclic changes of the lake surface.

Based on this definition and past Congressional authorizations, the residents of Hoover Beach can request Congressional authorization for study of the problem. However it is doubtful if a Federal project could be economically justified if a study were Congressionally authorized. Based on this preliminary investigation a Federal project would consist of removal of the existing shore protection structures, construction of a rubblemound revetment and backfilling of the area between the revetment and the houses. The costs for a project of this type are indicated in Table 10. Since a Federal project must be complete-within-itself, local interests would be required to provide the internal storm drainage system as part of the project.

In accordance with the President's proposed cost-sharing policy, projects for hurricane, tidal and lake flood protection require the local sponsor to provide a cash contribution equal to 20 percent of the first cost of the project in view of land enhancement benefits, or other special or local benefits which may be expected to accrue to the project. This cash contribution is exclusive of land costs or modification/relocation of existing improvement costs which are also a local cost.

Table 11 summarizes the annual costs, both Federal and non-Federal, as well as the resultant Benefit-Cost Ratio. The Benefit-Cost Ratio normally must be equal to or greater than 1.0 before the Corps recommends implementation of a project to Congress.

Table 10 - Cost Estimate - Rubblemound Revetment (Federal Project)

Item	Quantity	Unit	Price	Amount
			\$	\$
Rubblemound Revetment	2,600	LF	1,200	3,120,000
Removal of Ex. Structure	2,600	LF	500	1,300,000
Backfill	20,000	CY	5	100,000
Subtotal				4,520,000
Contingencies (25%+)				1,130,000
Construction Cost				5,650,000
E&D (15%+)				850,000
S&A (10%+)				600,000
First Cost				7,100,000
Federal First Cost (80%)				5,680,000
Non-Federal Costs				
First Cost Revetment				1,420,000
Internal Drainage				200,000
Lands (10 acres @ \$1,000/acre)				10,000
Non-Federal First Cost				1,630,000
Total Project Costs				8,730,000

Table 11 - Annual Charges - Rubblemound Revetment

Item	Amount
	\$
Federal First Cost	5,680,000
Non-Federal First Cost	1,630,000
Total First Cost	8,730,000
Annual Charges	
Federal:	
Capitol Recovery Factor (0.07361)	418,105
Non-Federal:	
Capitol Recovery Factor (0.07361)	119,984
Maintenance	145,016
Non-Federal Annual Charges	265,000
Total Annual Charges	683,105
Average Annual Benefits	140,000
Average Annual Costs	683,105
Benefit/Cost Ratio	0.20



The cost estimates shown in Table 10 are considered conservative and a detailed study would probably result in some escalation of these estimates. On the other hand the benefits are rather liberal in that since the reported damages have been averaged over a 9-year period instead of analyzing the frequency of the storms which generated the damages. A detailed study would probably result in a decrease in the Benefit-Cost Ratio.

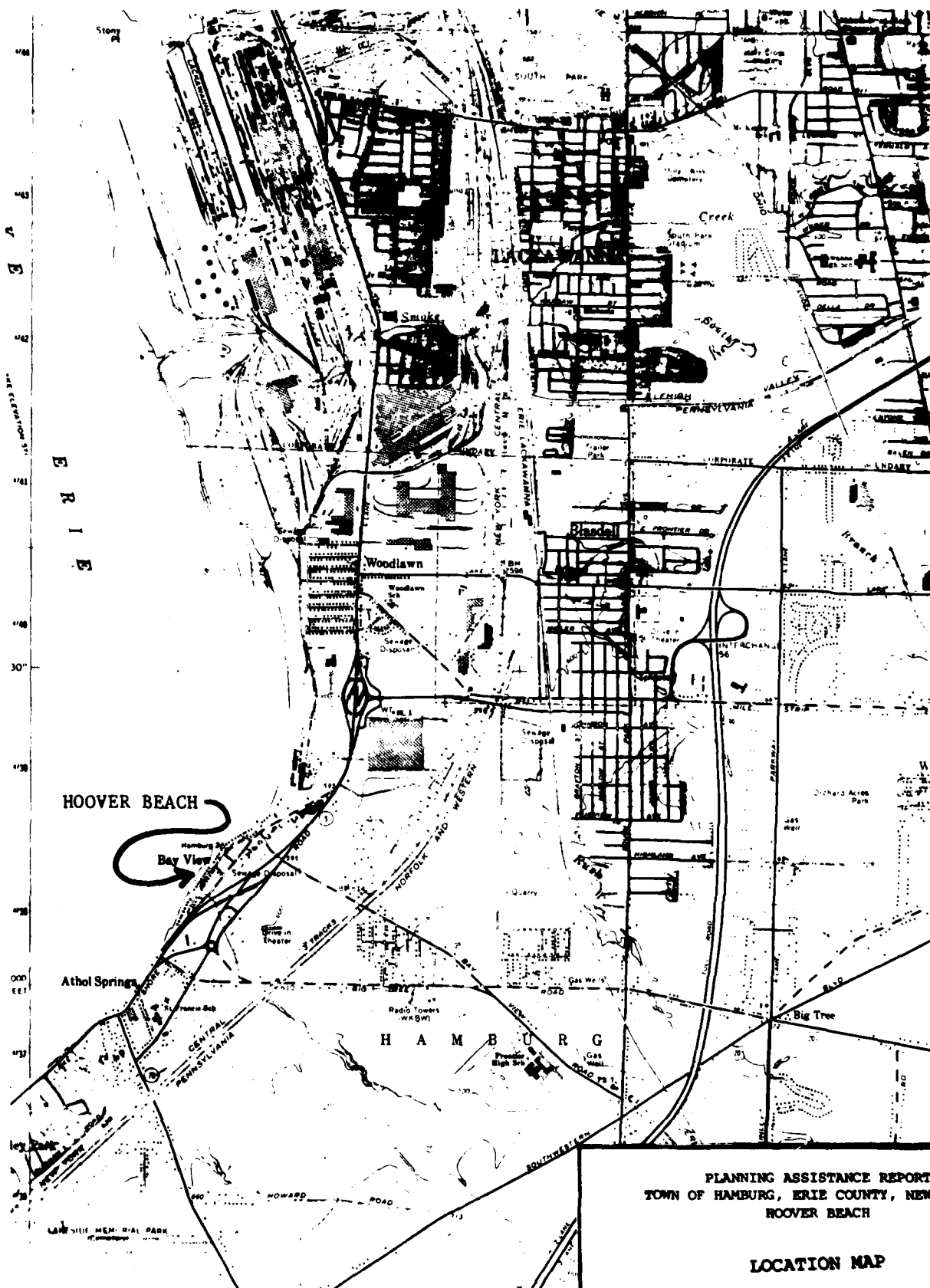
There are other drawbacks to a Congressionally authorized study of flood problems at Hoover Beach. The average implementation schedule for an authorized project is 18 years depending on manpower and funding restraints. If a Federal project is built at Hoover Beach, the project right-of-way and the areas lakeward of the project would remain under public ownership and the use of the shore upon which the amount of Federal participation is based would remain open and available to all on equal terms for the economic life of the project.

#### CONCLUSIONS

The flood problems at Hoover Beach are not eligible for assistance under any current Corps construction authority. Residents can seek Congressional authorization for further study of the problem based on past Congressional authorization for problems of this nature. However, it is doubtful if a Congressionally authorized study would result in a project since this investigation indicates that a project would not be economically justified.

Various alternatives are available to individual homeowners to upgrade the existing levels of protection, but an internal drainage system must be provided for the entire area to reduce flood damages. The Corps of Engineers recommends a rubblemound revetment as the most efficient form of flood and erosion protection.

The Buffalo District staff is available to provide planning and technical assistance to town officials in implementing any of the alternatives discussed in the report or any combination of alternatives. Requests for assistance should be directed to Colonel George P. Johnson, District Engineer, 1776 Niagara Street, Buffalo, NY 14207.



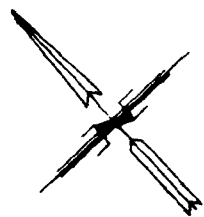
PLANNING ASSISTANCE REPORT  
TOWN OF HAMBURG, ERIE COUNTY, NEW YORK  
HOOVER BEACH

LOCATION MAP

U.S. ARMY ENGINEER DISTRICT, BUFFALO  
NOVEMBER 1979

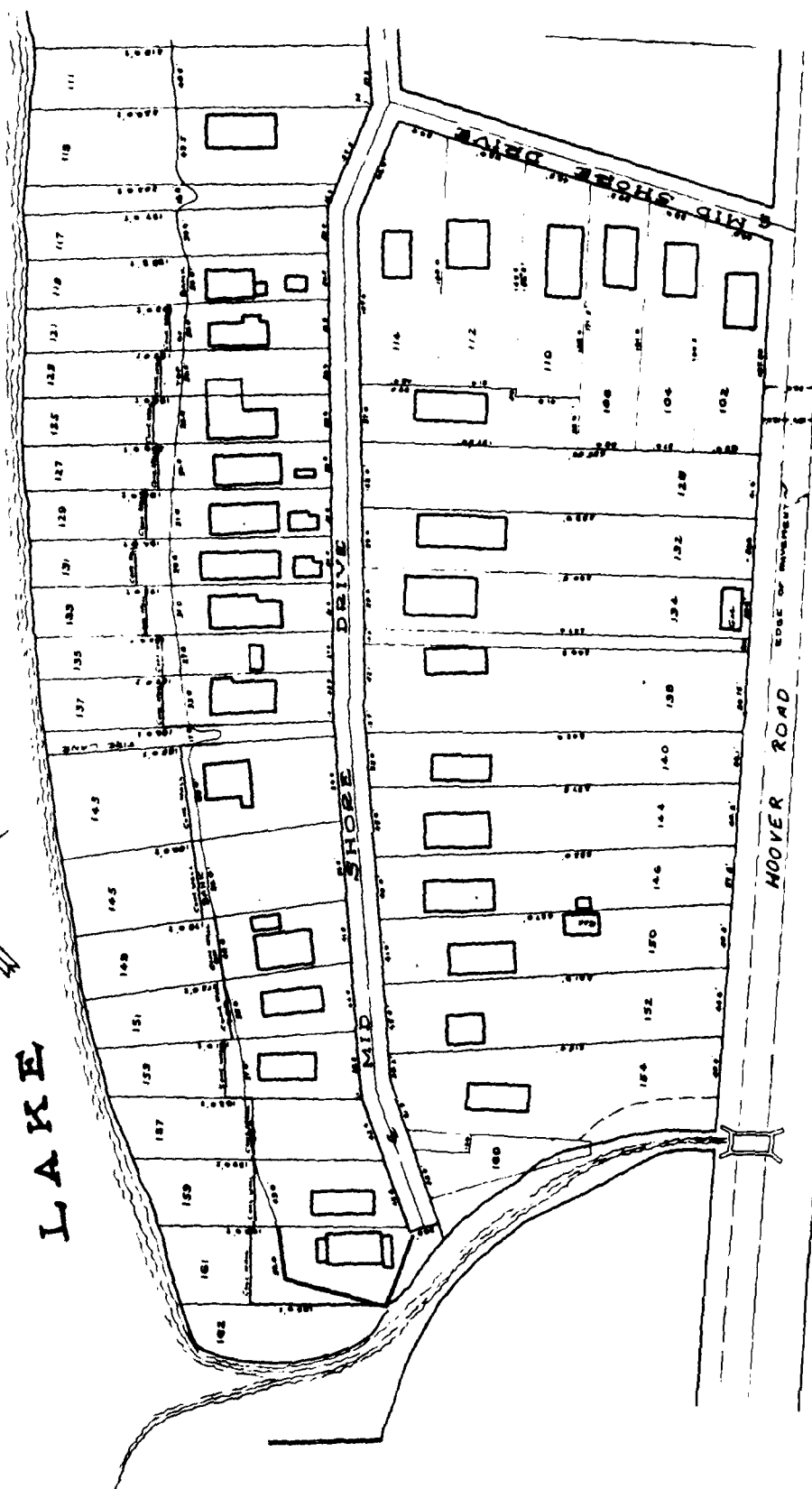
PLATE 1





ERIE

LAKE

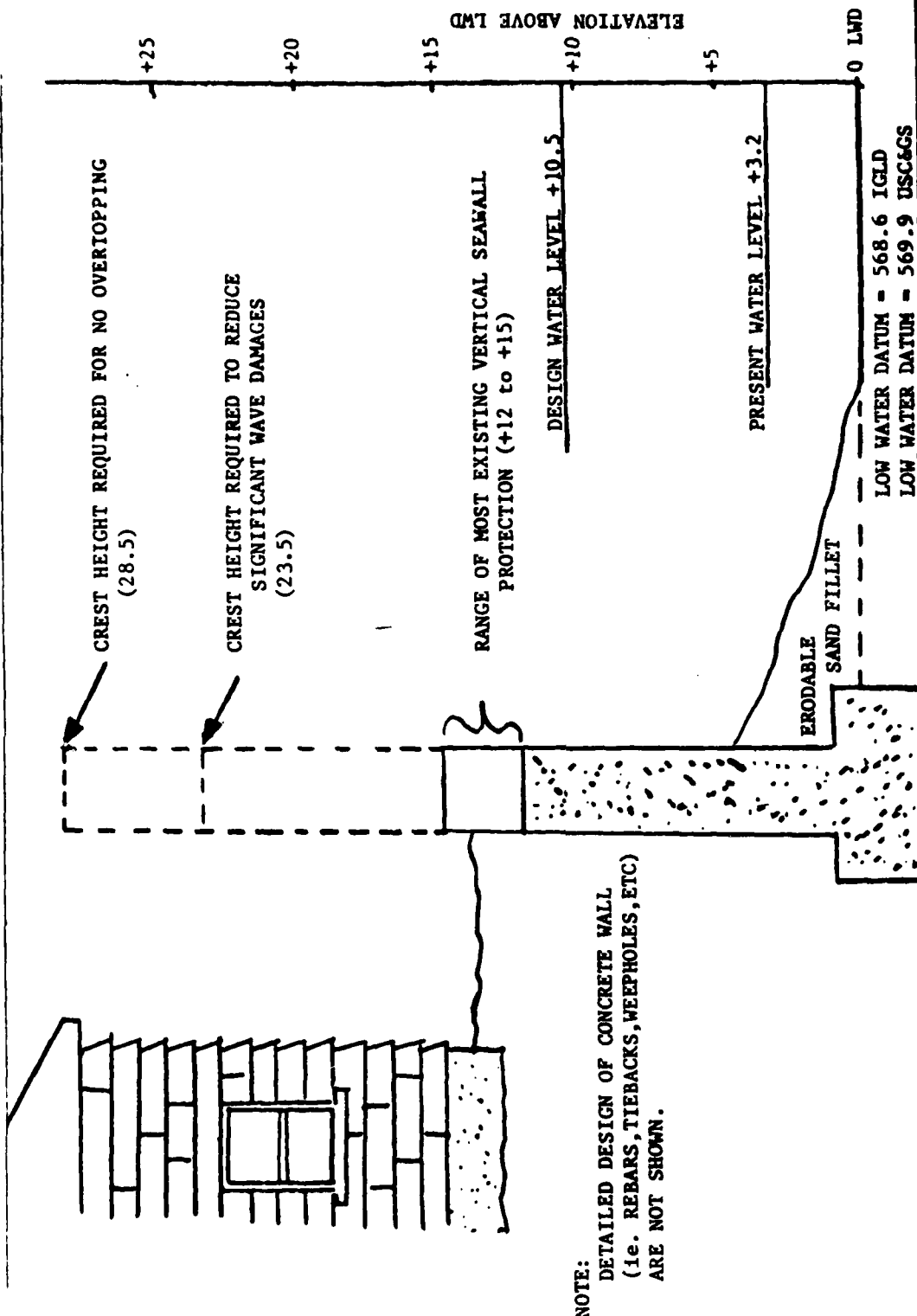


PLANNING ASSISTANCE REPORT  
TOWN OF ENNBURG, ERIE COUNTY, NEW YORK  
HOOVER BEACH

MID SHORE AREA

U.S. ARMY ENGINEER DISTRICT, BUFFALO  
NOVEMBER 1979





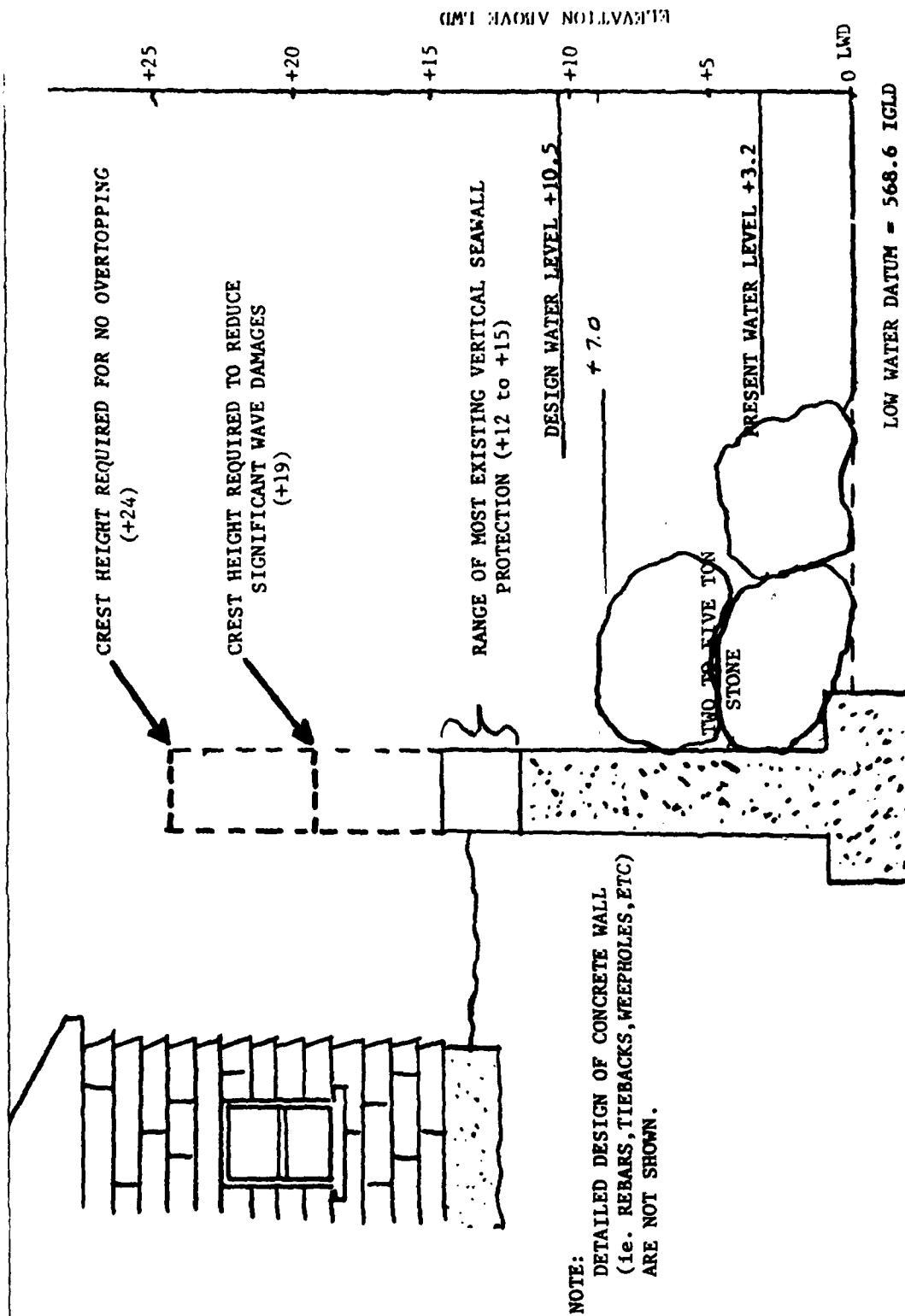
NOTE:  
 DETAILED DESIGN OF CONCRETE WALL  
 (ie. REBARS, TIEBACKS, WEEPHOLES, ETC)  
 ARE NOT SHOWN.

SKETCH OF GENERALIZED VERTICAL CONCRETE SEAWALL CROSS SECTION

PLANNING ASSISTANCE REPORT  
 TOWN OF HAMBURG, ERIE COUNTY, NEW YORK  
 MOORE BEACH

VERTICAL CONCRETE SEAWALL

U.S. ARMY ENGINEER DISTRICT, BUFFALO  
 NOVEMBER 1979



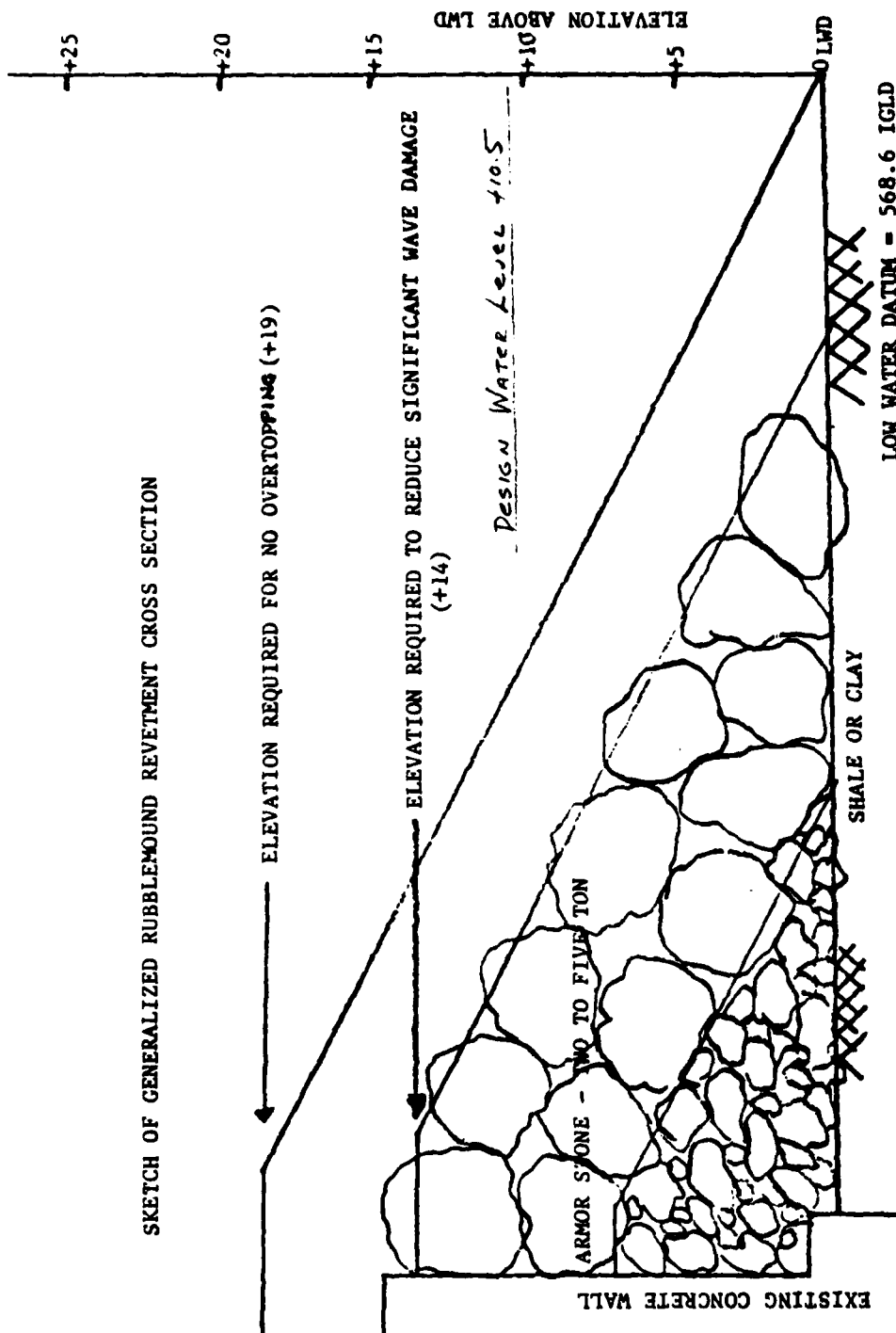
SKETCH OF GENERALIZED COMPOSITE SEAWALL CROSS SECTION

PLANNING ASSISTANCE REPORT  
TOWN OF ENNETIC, ELITE COUNTY, NEW YORK  
SCOTTER BEACH

COMPOSITE SEAWALL

U.S. ARMY ENGINEER DISTRICT, BUFFALO  
NOVEMBER 1979

SKETCH OF GENERALIZED RUBBLEMOUND REVETMENT CROSS SECTION



LOW WATER DATUM = 568.6 IGLD  
LOW WATER DATUM = 569.9 USC&GS

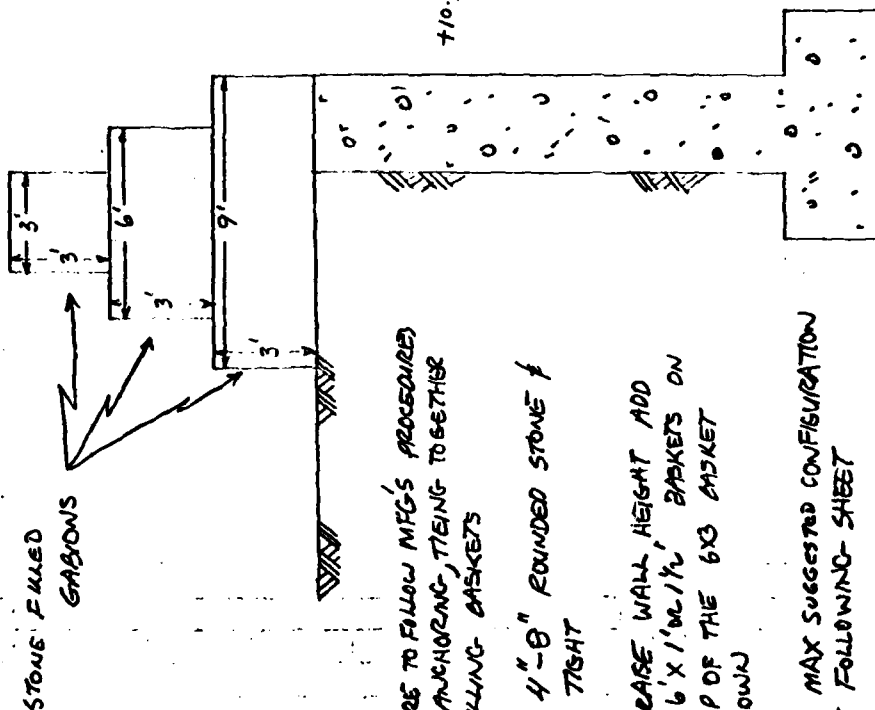
PLANNING ASSISTANCE REPORT  
TOWN OF HAMPSHIRE, ERIE COUNTY, NEW YORK  
HOOVER BEACH

RUBBLEMOUND REVETMENT

U.S. ARMY ENGINEER DISTRICT, BUFFALO  
NOVEMBER 1979



Hand-drawn elevation profile of a seawall. The vertical axis on the right is labeled "ELEVATION (F.T.)" and ranges from 0 to 25 in increments of 5. The profile shows a seawall with a crest at 23.5 feet, a top width of 15 feet, and a base width of 32 feet. The crest is labeled "23.5' CREST HEIGHT TO SIGNIFICANTLY REDUCE WAVE DAMAGE". The top width is labeled "15' HIGH WALL (EXISTING)". The base width is labeled "32' PRESENT WATER LEVEL". A dashed line at 10.5 feet is labeled "10.5 DESIGN WATER LEVEL". The area between the 10.5 design level and the 32-foot base level is shaded with diagonal lines.



- NOTES: 1) BE SURE TO FOLLOW MFG'S PROCEDURES  
FOR ANCHORING, TIEING TOGETHER  
& FILLING BASKETS

2) USE 4"-8" ROUNDED STONE &  
PACK TIGHT

3) TO RAISE WALL HEIGHT ADD  
6' X 1' OR 1 1/2' BASKETS ON  
TOP OF THE 6X3 BASKET  
SHOWN

4) FOR MAX SUGGESTED CONFIGURATION  
SEE FOLLOWING SHEET

5) THIS CONCEPT ASSUMES NO R/R RAY PLACED IN FRONT OF WALL

PLANNING ASSISTANCE REPORT  
TOWN OF HAMBURG, ERLE COUNTY, NEW YORK  
HOOVER BEAZLE

## GABTON AND CONCRETE SEAWALL

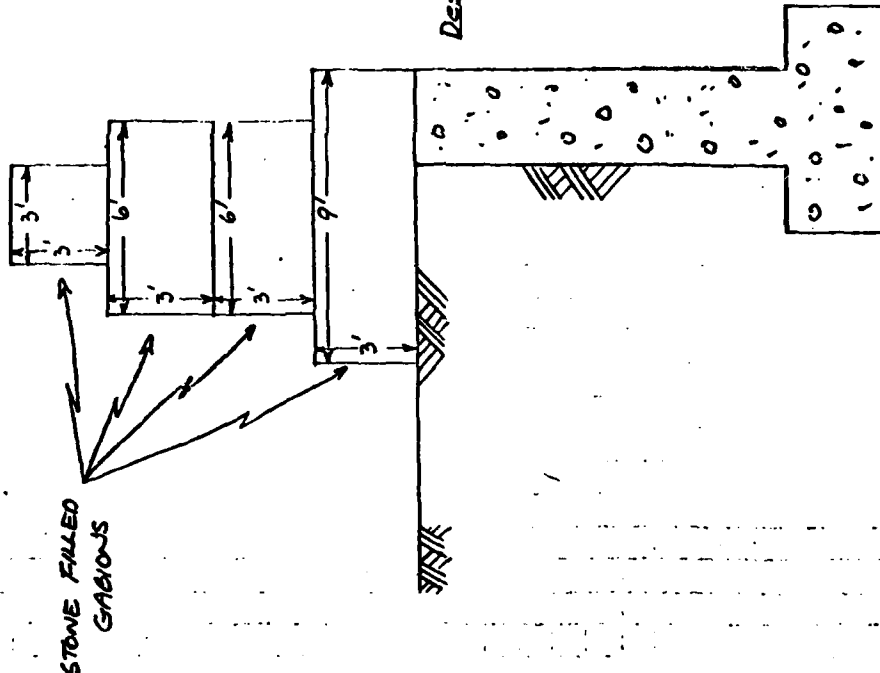
U.S. ARMY ENGINEER DISTRICT, BUFFALO  
NOVEMBER 1979

— 28.5' CREST HEIGHT  
REQUIRED FOR NO OVER TOPPING

— 23.5' CREST HEIGHT  
TO SIGNIFICANTLY REDUCE  
WAVE DAMAGES

— +12' LOW WALL  
(EXISTING)  
DESIGN WATER LEVEL +10.5

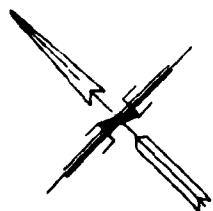
— +13.2' PRESENT  
WATER LEVEL



PLANNING ASSISTANCE REPORT  
TOWN OF HAMBURG, ERIE COUNTY, NEW YORK  
HOOVER BEACH

GABION AND CONCRETE SEAWALL

U.S. ARMY ENGINEER DISTRICT, BUFFALO  
NOVEMBER 1979



ERIE

LAKE



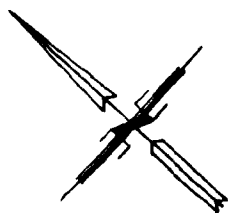
SCALE: 1" = 97'±

PLANNING ASSISTANCE REPORT  
TOWN OF HANBURG, ERIE COUNTY, NEW YORK  
HOOVER BEACH

SOUTH SHORE INTERNAL DRAINAGE

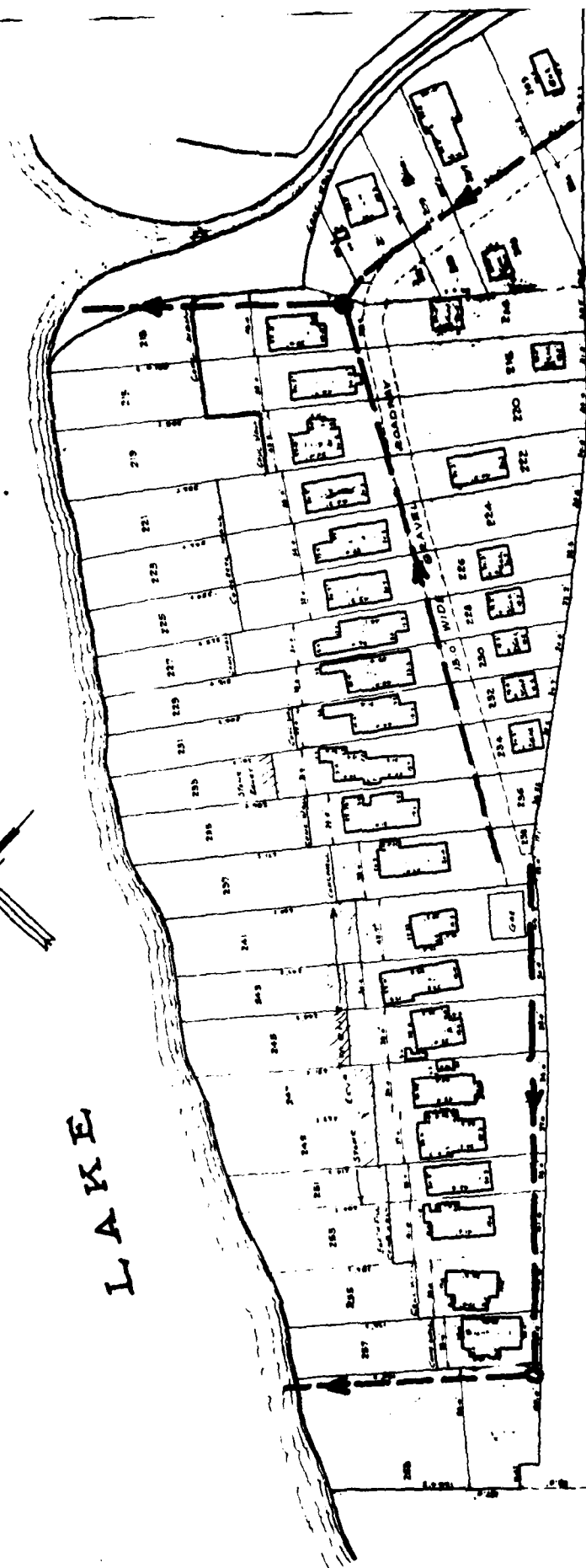
U.S. ARMY ENGINEER DISTRICT, BUFFALO  
NOVEMBER 1979

PLATE 10



ERIE

LAKE



HOOPER ROAD

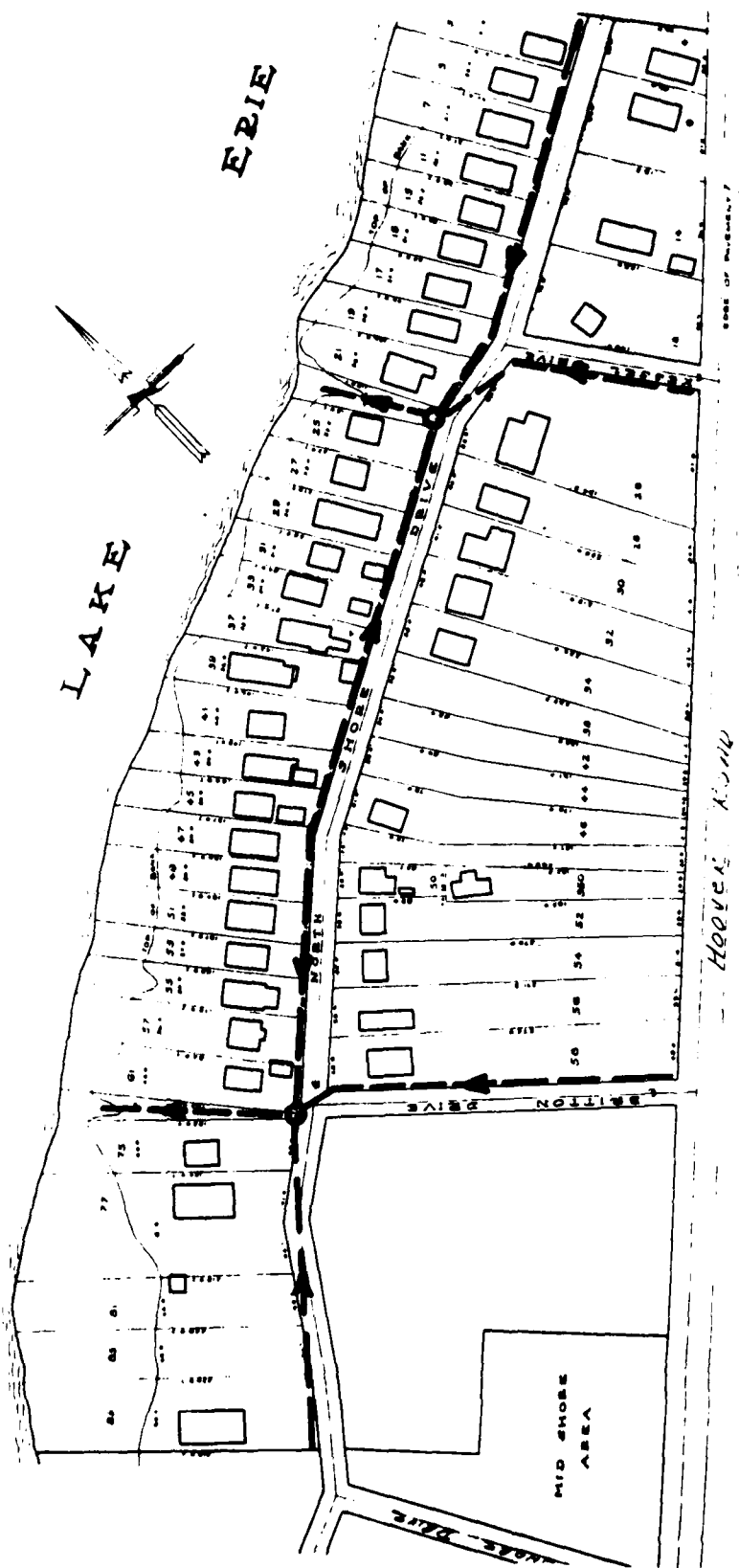
SCALE: 1" = 100'

PLANNING ASSISTANCE REPORT  
TOWN OF HAMURG, ERIE COUNTY, NEW YORK  
HOOPER BEACH

MID SHORE INTERNAL DRAINAGE

U.S. ARMY ENGINEER DISTRICT, BUFFALO  
NOVEMBER 1979

PLATE II



Scale: 1" = 128' ±

PLANNING ASSISTANCE REPORT  
TOWN OF HAMBURG, ERIE COUNTY, NEW YORK  
HOOVER ROAD  
NORTH SHORE INTERNAL DRAINAGE  
U.S. ARMY ENGINEER DISTRICT, BUFFALO  
NOVEMBER 1979

PLANNING ASSISTANCE FOR  
THE TOWN OF HAMBURG,  
COUNTY OF ERIE,  
NEW YORK

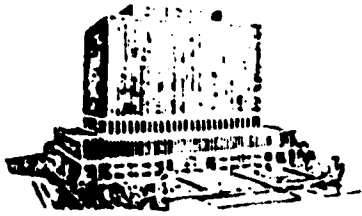
HOOVER BEACH

APPENDIX A

CORRESPONDENCE

US ARMY ENGINEERS DISTRICT, BUFFALO

DECEMBER 1979



# NEWS Release

FROM THE OFFICE OF ERIE COUNTY EXECUTIVE

EDWARD J. RUTKOWSKI

65 FRANKLIN STREET, BUFFALO, N.Y. 14202

October 19, 1979

**FOR IMMEDIATE RELEASE**

Erie County Executive Edward J. Rutkowski announced Friday that he has been notified that the County will receive a \$20,000 grant from the Federal Coastal Zone Management Office to develop an erosion control demonstration program together with communities along the Lake Erie Shore. The primary focus of the project will be the feasibility of utilizing a beach erosion control district to finance the construction and maintenance costs of effective physical erosion control devices.

Mr. Rutkowski said notification came from Robert Hansen, New York State Coastal Program Manager.

County Executive Rutkowski stated that, "the study will focus on the legal and financial implications of beach erosion control district formation and include extensive engineering studies in shoreline erosion areas, with recommendations for long and short range solutions.

The County Executive has worked closely with federal and state officials during the last several months stressing the importance of grant approval for our shoreline area which is severely affected by Lake Erie wave, wind and ice erosion. The program will assist the efforts of the County's recently established, Shoreline Task Force and hopefully will provide effective structural and financial methods to better protect shoreline properties. The demonstration program will be.

-more-

SAVE OUR ENVIRONMENT - USE RECYCLED PAPER

**developed as a model to be utilized by all Erie County shoreline communities.**

The initial study area will be in the Town of Hamburg with particular emphasis on the problems at Hoover Beach. When contacted concerning Hamburg's participation, Town Supervisor Leo Fallon expressed the town's enthusiasm to develop the program with the County and State.

Details on the project needs and conduct responsibilities will be coordinated between the County and Town planning staffs.

The County and Town will provide \$5,000 in in-kind services as a local matching share of the grant.

(Contact: Harry Spector, 346-8799)



# DISPOSITION FORM

For use of this form, see AR 340-13, the proponent agency is TAGCEN.

REFERENCE OR OFFICE SYMBOL	SUBJECT
NCBED-DC	Meeting with Erie County Shoreline Task Force, 20 August 1979

TO	FROM	DATE	CMT 1
Chief, Coastal Engrg. Section	Joan Pope	22 August 1979	
Chief, Design Branch		Pope/ps/2229	
Chief, Flood Plain Mgt.			
Asst. Chf. Engrg. Div.			
Chief, Engineering Div.			
District Engineer			

1. On 20 August 1979, Ken Hallock, Tom Pieczynski and Joan Pope attended the Erie County Shoreline Task Force meeting in Buffalo, NY as representatives of the District Engineer. The Corps of Engineers representatives made a presentation on shoreline damages (their cause and possible solutions) and specifically addressed low cost forms of protection and application to Hoover Beach as an example of some of the problems prevalent along the Erie County shore. The Corps representatives also answered some specific questions regarding the present Corps authority raised by the Task Force.

2. The meeting dialog centered around identifying programs and authorities which control the availability of federal funds. Recommendations were made by various task force members to develop federal authority to assist private home owners with technical assistance and/or federal construction funds through SBA, HUD, Corps of Engineers, FDAA, etc.

3. Other major points of discussion were as follows:

a. The Task Force decided to petition the County executive to request an emergency declaration from the Governor for the Erie County shore.

b. The possibility was raised of obtaining congressional authorization for a Corps study of the Erie County or New York State shore of Lake Erie similar to the Lake Ontario Shoreline Study.

c. The question was raised regarding the potential for federal protection of private lands from erosion.

d. The need for individual technical assistance with an emphasis on specific costs and longevity estimates for low cost forms of protection was identified. The committee specifically discussed the need for shorter frequency forms of protection which are still effective and affordable.

e. The Task Force determined a need to identify the public lands which may already be eligible for protection under existing Corps authorities.

f. A regional form of protection such as offshore breakwaters was also mentioned as a viable federal approach to the protection of both public and private lands.

NCBED-DC

SUBJECT: Meeting with Erie County Shoreline Task Force, 20 August 1979

4. The Task Force identified specific tasks they would like the Corps to accomplish within the limits of current authority.

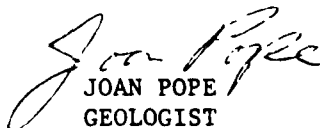
a. The Task Force requested that the Corps extend the current technical assistance request to cover all of Hamburg shore with an emphasis on what currently exists and what is needed.

b. The Task Force would like the Corps to address the need for policy or authority modification and use the report as a basis for requesting a congressional decision for further project authorization.

c. The Task Force requested that the Corps identify the specific costs per structural alternative as if built by home owner. *material cost - rate - Truck, loader,*

d. The Corps was asked to address protection alternatives for public lands and also offer plans for phased construction of private forms of protection.

5. The next meeting is scheduled for 3:30 - 5:00 on 17 September 1979.

  
JOAN POPE  
GEOLOGIST

NCBED-D  
✓NCBED-DC  
NCBED-PF

With regard to tasks (Item 4) that the Task Force wants the Corps to accomplish under the limits of its current authority note the following comments:

Re 4a.

Current technical assistance is limited to Hoover Beach because authority pertinent to flooding was used. All of Hamburg Shore cannot be included in similar detail because authority for study does not exist. Scope will be as broad as possible and authority stretched to give public the benefit of the doubt.

Re 4b.

Corps report will discuss what if anything precludes our involvement. The task force will have to use that as a basis for whatever changes they wish to suggest. (Chuck Gilbert knew of no specific OCE policy regarding us perpetuating our own existence). It would not be proper for us to attempt to extend our authority in this matter. Our mission comes from Congress and they would be aware of required changes via our report.

Re 4c.

The report will include material, equipment, and other associated costs that private individuals may use for estimating their proposed activities.

Re 4d.

The Corps has and will continue to address specific areas of public concern provided they fall under legitimate authorities. We will also provide technical assistance and/or direct requestors to other resources where appropriate. We have already been, or are involved with a number of requests

i.e. Big Sister Creek - erosion of bridge  
St. Vincent DePaul Camp - erosion of bluff  
Angola Water Plant - erosion of plant  
Wendt Beach - erosion of beach

# DISPOSITION FORM

For use of this form, see AR 340-13, the proponent agency is TAGCEN.

REFERENCE OR OFFICE SYMBOL	SUBJECT		
NCBED-DC	Field Trip Report - Lowbanks, Ontario		
THRU: Chief, Design Branch Chief, Engrg. Div.	FROM Kim Hoffman Joan Pope	DATE 14 August 1979 Hoffman/ps/2229	CMT 1
TO: Chief, Coastal Engrg.			
<p>1. On 26 July 1979 Joan Pope, Geologist and Kim Hoffman, Civil Engineer, Coastal Engineering Section, Design Branch visited Lowbanks, Ontario Shore Protection Project.</p> <p>2. Field inspection trip was made on the request of Donald M. Liddell, Chief of Engineering, to determine if practical application of Lowbanks shore protection method could be used in U.S. shore protection projects.</p> <p>3. On the day of this inspection, waves were out of the southwest. The breaking wave height averaged below 2 feet. The general weather was hot and humid with intermittent showers.</p> <p>4. Available for comment and information during the inspection were representatives from the Engineering Department of the Haldimand-Norfolk County Municipality, Alix Lint and Don Brooks. Mr. Lint has been connected with the shore projection project from its onset.</p> <p>5. <u>Project History</u> - Regional Route 3, under the jurisdiction of the Municipality of Haldimand-Norfolk, borders Lake Erie for approximately 2 miles. The road consists of a natural gravel base with an asphalt cap.</p> <p>During the early 1950's severe storms caused cobbles and gravel to be washed up from the beach onto the road obstructing the right-of-way. Due to this activity and the consequent undermining of the road base a portion of the road collapsed in 1955. Emergency action was required to develop a form of protection for the road.</p> <p>1955 Construction - A stone revetment was built along the lakeside embankment of Regional Route 3. No further construction or repair work was attempted until the 1970's. The project was constructed by the Municipality of Haldimand-Norfolk.</p> <p>1974 Construction - A portion of Regional Route 3 collapsed again during a severe storm in 1974. A re-evaluation of the revetment system was made and further measures were deemed necessary. A continuous stone breakwater was constructed. It was built 40 feet offshore in approximately 2 feet of water. This construction was done by the Municipality of Haldimand-Norfolk.</p> <p>1976 Construction - By 1976 some portions of Regional Route 3 were experiencing damage as gravel and cobbles were washed out of the road bed. The 1974 breakwater was considered insufficient and more protection deemed necessary. The 1976 construction consisted of a stone revetment at water's edge (approximately 6 to 10 feet from the original revetment) and a series of angle groins. The revetment and groin cross section is 8 feet high, with a 4 feet wide crest and a 1 on 1½ slope. Due to public access requirements of property owners and concern over nearshore water quality</p>			

NCBED-DC

SUBJECT: Field Trip Report - Lowbanks, Ontario

the revetment is non continuous. The series of angle groins are spaced 75 feet apart and angled toward the southeast. The 3330 feet of revetment was constructed of stone obtained from a nearby quarry. The construction was put under contract for bid. The cost of the 1976 construction was approximately \$58 per foot placed.

6. Specific Observations of the project area were made:

- a. 1955 revetment shows areas of settling and disrepair.
- b. 1974 breakwater, 40 feet lakeward of the water's edge has deteriorated in some areas.
- c. An accumulation of gravel and cobbles is evident between the angled groins and between the 1955 revetment and the 1976 revetment. The build-up in this area is due to material overtopping the breakwater and revetment.

7. Conclusions: The structures built for shore protection in Lowbanks, Ontario have functioned well with satisfactory results for their intended purpose. The revetment breakwater system trapped gravel during periods of overtopping and increased the shore elevation thereby protecting the road.

The design is efficient and economical because of several, unique, project particularities:

- a. The predominant high wave action is generated by storms from the southwest. The regional littoral drift is therefore from the west to the east. However, small waves from the southeast can cause localized reversals.
- b. The design of shore protection construction is oriented specifically to protect the road from southwest storms which cause a rise in lake level and undercut the road by removing gravel and cobbles. This limited design purpose is not necessarily compatible with the requirements of a recreational beach as access to the water is greatly restricted. The structure does not protect houses from flooding due to storm surges. A rise in water level submerges the structures and inundates inland.
- c. Environmental studies and permits review were not necessary for construction.
- d. Access during construction was simple and unrestricted. Construction equipment could easily manage the slope from the road to the water's edge in numerous areas, reducing the project costs.
- e. Stone for construction was locally available as quarry scrap at a very cheap cost. Placed stone cost \$7.47 per ton for the 1976 work.
- f. The placed stone sits on bedrock, therefore, there was no need for foundation preparation. Large rock was placed directly on the bedrock without any filter. Also, no core was needed since the littoral material and bank material consists of cobbles and gravel which are too large to significantly leach through the structure. The presence of bedrock and cobble banks reduced the need for a complex structure cross section, thus, greatly reducing the cost.

Incl:

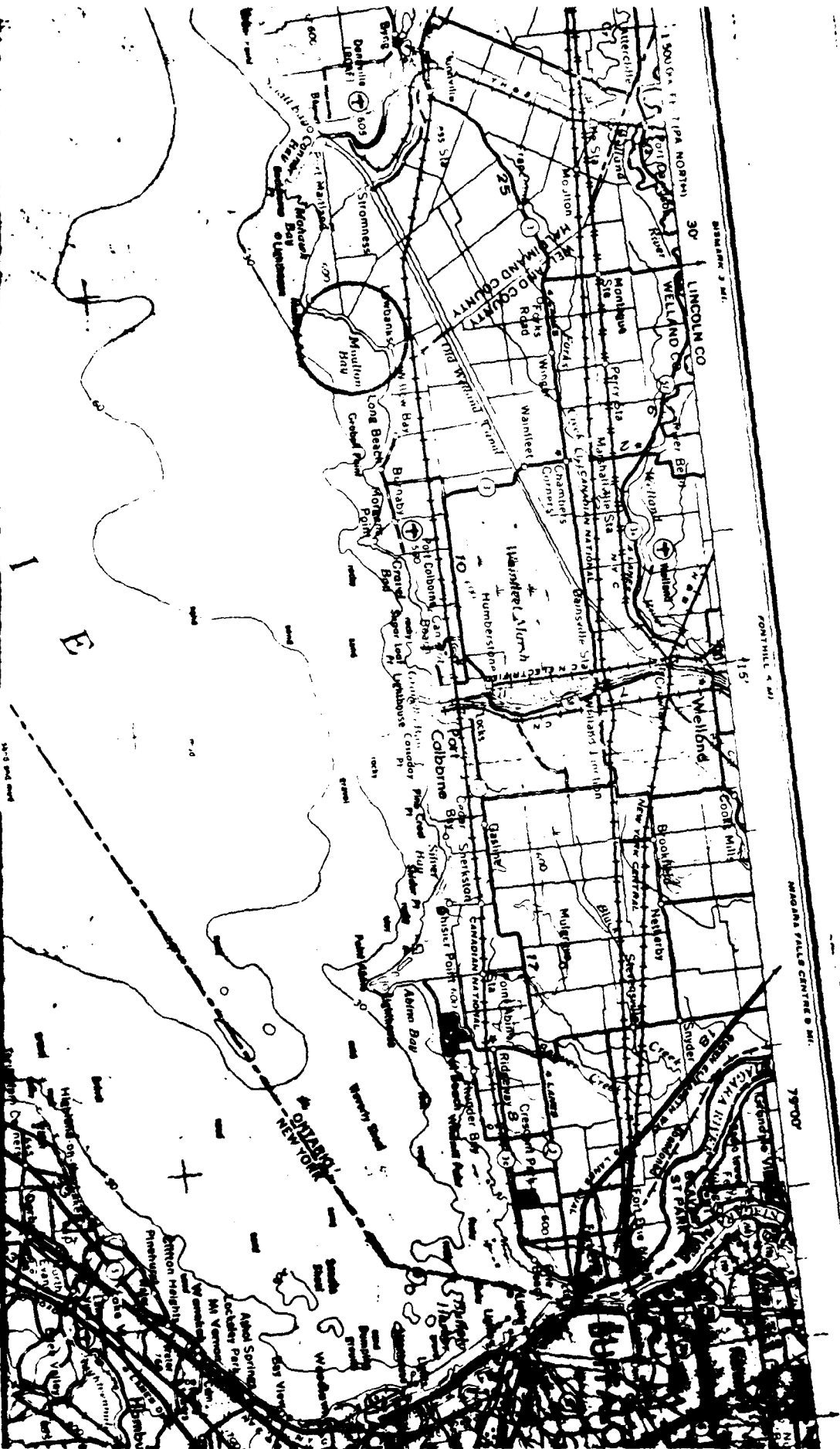
- 1. Location Map
- 2. Shore Protection Sketch
- 3. photographs

*Kimberly Hoffman*  
KIMBERLY HOFFMAN  
Civil Engineer

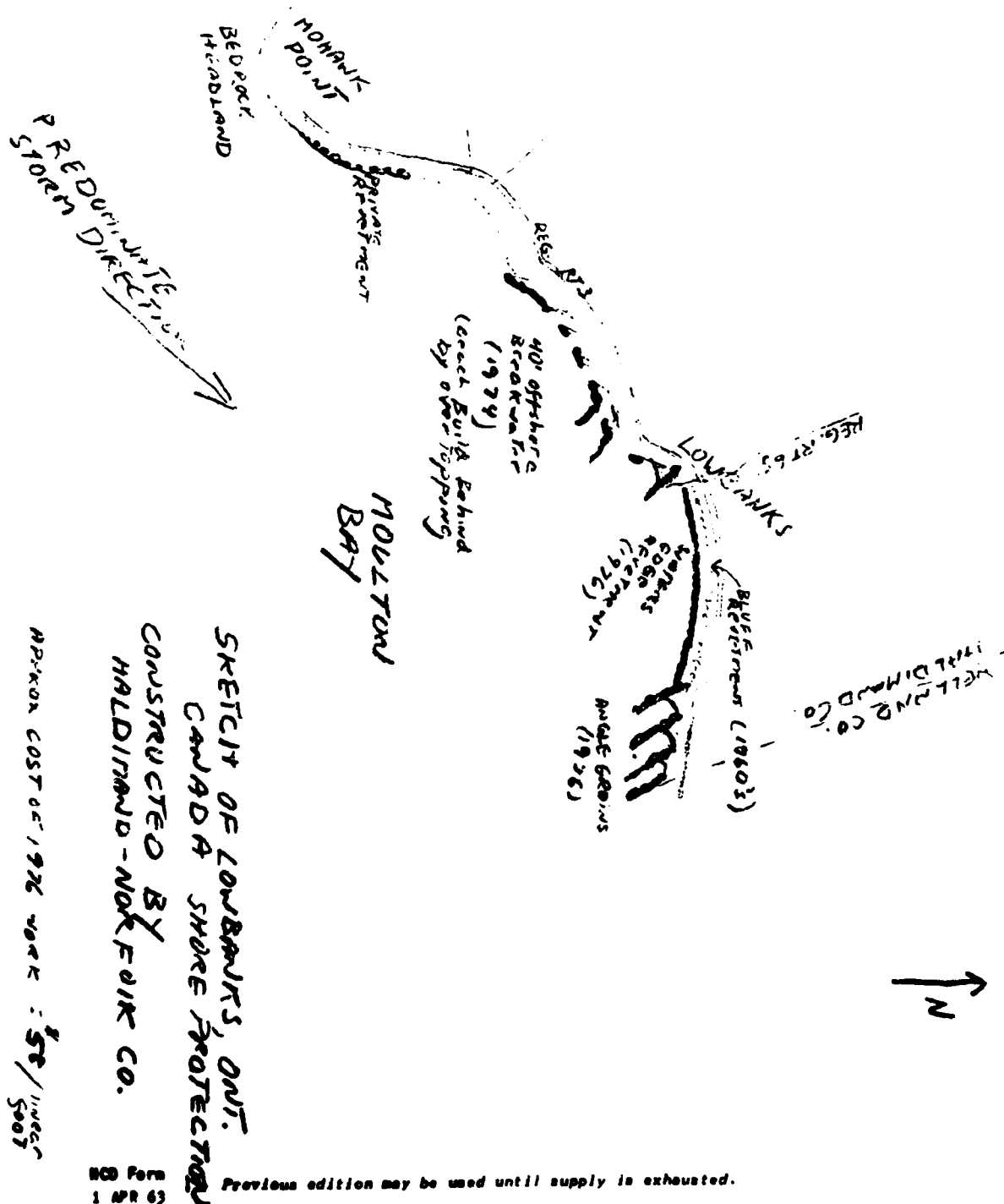
*Joan Pope*  
JOAN POPE  
Geologist

# OGDENSBURG

# BUFFALO



COMPUTATION SHEET	DATE 26 July 79	PAGE OF	FILE NUMBER
NAME OF OFFICE NCBED-DC		COMPUTATION	
SUBJECT LOWBANKS ONTARIO, CANADA		SOURCE DATA SHORE PROT.	
COMPUTED BY PAC	CHECKED BY K. Hoffman	APPROVED BY	



NCB Form  
1 APR 63

Previous edition may be used until supply is exhausted.

NCBED-PF

27 July 1979

Mr. Edward David Rebmann, Jr.  
245 South Shore Drive  
Blasdell, NY 14219

Dear Mr. Rebmann:

Thank you for your letter of 15 July 1979 inviting me to inspect the erosion control project at Lowbanks Ontario, with you.

Unfortunately, my current schedule does not permit me to accept your invitation. Members of my staff have contacted local Canadian officials to gather information about the nature and effectiveness of the structure. Next week, a member of my staff will visit the site. If these investigations indicate that this type of erosion control measure is effective, it will be considered as an alternative in the studies of flood and erosion problems at Hoover Beach.

I regret that I cannot accept your invitation and assure you that we will do everything possible to resolve the problems at Hoover Beach.

Sincerely,

GEORGE P. JOHNSON  
Colonel, Corps of Engineers  
District Engineer

CF:

✓NCBED-PF

Sloan \_\_\_\_\_  
Pieczynski \_\_\_\_\_  
Gilbert \_\_\_\_\_  
Hallock \_\_\_\_\_  
Liddell \_\_\_\_\_  
Braun \_\_\_\_\_  
Johnson \_\_\_\_\_



NCEDD-PF

5 July 1979

Honorable Jack Kemp  
House of Representatives  
Washington, DC 20515

Dear Mr. Kemp:

Thank you for your letter dated 25 June 1979, requesting information on possible Corps of Engineers assistance with erosion problems at Hoover Beach, Hamburg, New York.

I received a similar request from Mr. Rebmann on 6 June 1979. Enclosed for your information is a copy of my 20 June 1979 reply to Mr. Rebmann. I have recently received the request from the town of Hamburg for a study, and I am aware of the urgency of the problems at Hoover Beach. My staff is making every effort to find a satisfactory solution.

I hope this information meets your current needs.

Sincerely yours,

1 Incl  
as stated

GEORGE P. JOHNSON  
Colonel, Corps of Engineers  
District Engineer

CP:

HODA (DAEN-CWA-D) w/Incl & incmg. corresp.

NCEDD

Exec. Ofc.

PAO

✓ NCEDD-PF

Sloan

Pieczynski

Gilbert

Hallock

Liddell

Braun

Johnson

Honorable Jack Kemp  
Representative in Congress  
1101 Federal Building  
111 W. Huron St.  
Buffalo, NY 14202

NCBED-PF

SW/2146

6 July 1979

Leo J. Fallon, Supervisor  
Town of Hamburg  
S-6100 South Park Avenue  
Hamburg, NY 14075

Dear Mr. Fallon:

This is in reply to your letter dated 27 June 1979 requesting a study of erosion problems in the Hoover Beach area of the town of Hamburg, NY.

My staff is initiating a study of the problems at Hoover Beach under my technical assistance program authority. The study will identify all aspects of the problem and alternative solutions. A preliminary economic feasibility analysis will be made to determine if Federal interest is warranted. Upon completion of the study, I will be in a position to advise you on the best course of action to relieve the problems at Hoover Beach. My staff will make every effort to complete the study by 1 October 1979.

If you have any questions concerning the study, please contact Mr. Thomas J. Pieczynski, Chief, Flood Plain Management Services, at (716) 876-5454, ext. 2143.

I hope this information meets your current needs.

Sincerely yours,

GEORGE P. JOHNSON  
Colonel, Corps of Engineers  
District Engineer

CF:  
NCBED-PF

Sloan \_\_\_\_\_  
Pieczynski \_\_\_\_\_  
Gilbert \_\_\_\_\_  
Hallock/ \_\_\_\_\_  
Liddell \_\_\_\_\_  
Braun \_\_\_\_\_  
Johnson \_\_\_\_\_

PLEASE RESPOND TO THE BUFFALO  
DISTRICT OFFICE  
111 West Huron St. - 14202

Congress of the United States

House of Representatives

Washington, D.C.

June 25, 1979

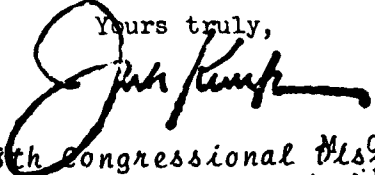
Sir: 

The attached communication

is sent for your consideration.

Please investigate the statements  
contained therein and forward me  
the necessary information for re-  
ply, returning the enclosed corre-  
spondence with your answer.

Yours truly,

  
38th Congressional District

1000 1000 1000 DR., 100 South Shore Dr., Elmsford, New York 14229

RECEIVED

JUN 7 79

JACK KEMP MC  
BUFFALO, NY

Jack,

This is important

Please find enclosed a "Corps report  
on Special Continuing Authorities"  
under the 1960 Flood act Section 206. (1)  
We may qualify for 1,000,000 dime  
Project —

Please Contact Corps and stress  
the need for this in Hoover Beach —  
my Best as always — Dave

June 1977

U.S. ARMY CORPS OF ENGINEERS  
BUFFALO DISTRICT  
1776 NIAGARA ST.  
BUFFALO, N.Y. 14207  
(716) 876-5454

## SPECIAL CONTINUING AUTHORITIES

### INTRODUCTION

Special continuing authorities are items of legislation giving responsibility to the Secretary of the Army through the Chief of Engineers for authorization and funding certain work items. The objective is to make a fast response to relatively small problems. Congress, in effect, has told the Corps of Engineers that they are responsible enough to carry out certain programs on its own without specific Congressional authorization. The authorizing authorities are separated as construction authorities and other continuing authorities. This section will describe the various types of continuing authorities.

General - Authorizing legislation for most small projects specifies a Federal cost not to be exceeded per project and limits total appropriations nationwide per fiscal year. Each project selected must be economically justified, complete within itself, and be engineeringly and environmentally feasible.

Project Design Criteria - Projects developed under these authorities must provide the same complete project for the locality that would have otherwise been recommended under regular Congressional authorization procedures. An increment of a larger overall project is not eligible for construction under these authorities.

Local Cooperation and Participation - Local sponsorship must be provided by a State or local governmental body empowered under state law with the necessary legal and financial authority to comply with required local cooperation. Local participation for these projects is similar to that required for regularly authorized projects.

### CONSTRUCTION AUTHORITIES

There are currently six construction authorities, each describing a specific purpose for which the Chief of Engineers is permitted to develop and construct small projects. A brief summary of each of the six construction authorities is as follows:

*Incl 1*

- . A safe entrance channel, protected by breakwaters or jetties if needed
- . A protected anchorage basin
- . A protected turning basin
- . A major access channel leading to the anchorage basin or locally provided berthing area

Items that are the responsibility of local interests include:

- . Docks, landings, piers, berthing areas, boat stalls, slips, mooring facilities, and launching ramps
- . Interior access channels needed for maneuvering into berths
- . Availability of a public landing or wharf
- . Servicing facilities such as fuel, sanitary cleanout areas, and policing
- . Standard lands, easements, and rights-of-way cooperation

Small navigation channels or extension of existing projects on a river or in a harbor can also be included under this authority. A reconnaissance report, detailed project report, and an EIS will be required.

FEDERAL COST LIMITATION/PROJECT: \$2,000,000

5. Snagging and Clearing for Navigation (Section 3) - This program is the same as that for Flood Control except it's in the interest of Navigation under a different authorization. It is the policy of the Chief of Engineers to utilize this authority primarily for emergency work to provide existing traffic with immediate and significant benefit. Work that cannot be accomplished under this authority is: (1) work within limits of any authorized projects; (2) for repeated operations in the same location; and (3) for general widening and deepening.

FEDERAL COST LIMITATION/PROJECT: None

6. Small Beach Erosion and Shore Protection Project Authority (Section 103) - Authorization is provided (within specific limitations) to undertake construction of small shore and beach restoration and protection projects not specifically authorized by Congress. In addition to or in lieu of physical remedial measures such as groins, seawalls, etc., provisions for periodic beach nourishment can be recommended when such a measure can be demonstrated as the best appropriate plan. Federal participation is generally limited to a specific period of time (normally ten years) for a periodic nourishment program. A reconnaissance report, a detailed project report, and an EIS are required for a study under this program.

FEDERAL COST LIMITATION/PROJECT: \$1,000,000

JACK KEMP  
38TH DISTRICT, NEW YORK

COMMITTEE:  
APPROPRIATIONS

RANDAL TEAGUE  
ADMINISTRATIVE ASSISTANT

LOU ROTTERMAN  
EXECUTIVE ASSISTANT

**Congress of the United States**  
**House of Representatives**  
**Washington, D.C. 20515**

June 25, 1979

WASHINGTON OFFICE:  
2244 RAYBURN HOUSE OFFICE BUILDING  
AREA CODE 202: 225-5285

DISTRICT OFFICE:  
1101 FEDERAL BUILDING  
111 WEST HUNGH STREET  
BUFFALO, NEW YORK 14202  
AREA CODE 716: 846-4123

ED RUTKOWSKI  
DISTRICT REPRESENTATIVE

Mr. Edward D. Rebmann, Jr.  
245 South Shore Drive  
Blasdell, New York 14219

Dear Dave:

Jack asked me to respond to your June 6th note.

The Army Corps is currently reviewing whether or not a demonstration project such as you suggest would be permissible under the appropriate provisions of the 1960 Flood Act.

I'll keep you posted on the results of the Corps review of this matter.

Sincerely,

Russ Cugino  
Administrative Assistant

RG/pb

# Town of Hamburg

Supervisor  
LEO J. FALLON

Councilmen  
FRANCIS J. METZ  
PAUL J. SCHLENN  
FRANK J. WAHNS  
BARBARA C. WICKS

Town Clerk  
HENRY O. LEYH



Town Attorney  
WALTER L. ROTH

Supt. of Highways  
RICHARD A. SMITH

Receiver of Taxes  
ROBERT A. MARS

Town Justice  
NORMAN E. KUEHNEL  
THOMAS H. ROSINSKI

S-6100 SOUTH PARK AVENUE HAMBURG, NEW YORK 14075

TEL: (716) 649 6111

June 27, 1979

Colonel Johnson  
Army Corp. of Engineers  
1776 Niagara Street  
Buffalo, New York

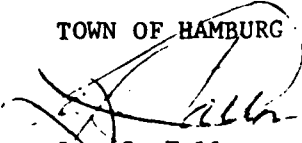
Dear Colonel Johnson:

Would you please undertake a study of the erosion conditions in the Hoover Beach area of the Town of Hamburg?

Your consideration of this matter will be greatly appreciated.

Yours very truly,

TOWN OF HAMBURG

  
Leo J. Fallon  
Supervisor

LJF:amb  
cc: Mr. Rebmann

ONE COPY

Checked by 

Filed by 



NCBED-PF

20 June 1979

Mr. Edward D. Rebmann, Jr.  
245 South Shore Drive  
Blasdell, NY 14219

Dear Mr. Rebmann:

This is in reply to your letter of 6 June 1979 requesting a small beach erosion project under Section 206 of the 1960 Flood Control Act for the Hoover Beach area, Hamburg, NY.

Section 206 authorizes me to undertake flood plain information studies at the request of local government. It does not authorize construction of any projects. Small beach erosion projects are authorized by Section 103 of the 1963 Rivers and Harbor Act, as amended, and applies only to publicly owned recreational shoreline such as parks, bathing beaches, and conservation areas. I currently have no authority to provide erosion protection on private property.

As determined at my meeting with you and others from Hoover Beach on 14 June 1979, my staff can undertake an investigation of the situation under the technical assistance program to identify all aspects of the problem and alternative solutions. Preliminary economic feasibility studies would also be made and possible courses of action identified. This report would determine whether there is a Federal interest in the Hoover Beach problem. I would then be in a position to advise you and the other residents of the best course of action. My staff will make every effort to complete these studies by 1 October 1979.

In order to initiate the study and maintain our projected schedule, I will need a request for the study from the town of Hamburg as soon as possible. Early in our study effort we will schedule a meeting between my study team and representatives of Hoover Beach so that we can obtain all available information as the study progresses.

If you have any questions concerning the studies, please contact Mr. Thomas J. Pieczynski, Chief, Flood Plain Management Services, at (716) 876-5454, extension 2143.

NCBED-PF

Mr. Edward D. Rebmann, Jr.

I hope this information meets your current needs.

Sincerely yours,

GEORGE P. JOHNSON  
Colonel, Corps of Engineers  
District Engineer

CF:

NCBED-PF

Sloan \_\_\_\_\_  
Pieczynski \_\_\_\_\_  
Gilbert \_\_\_\_\_  
Hallock/ \_\_\_\_\_  
Liddell \_\_\_\_\_  
Braun \_\_\_\_\_  
Johnson \_\_\_\_\_



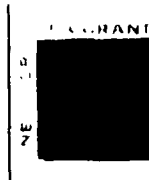
## COOPERATIVE EXTENSION

## NEW YORK STATE

State University • State University of New York • U.S. Department of Agriculture  
National Cooperative Extension Administration cooperating

New York Sea Grant Program

Regional Sea Grant Office • Morgan Hall  
State University College  
Brooklyn, N.Y. 11420  
Tel. 395-7638



June 18, 1979

Thomas F. Gilmartin  
Supt. Bldgs. & Grounds  
Hamburg Town Hall  
S-6100 South Park Avenue  
Hamburg, New York 14075

Dear Mr. Gilmartin:

I am writing in response to your inquiries regarding the erosion problem in the Hoover Beach area. Presently, there are no direct federal grants available for seawall construction. However, there are two possibilities if you wish to work with the U. S. Army Corps of Engineers in Buffalo.

The first type of assistance would require specific Congressional authorization. Congress has determined that a federal interest exists in the comprehensive planning of water resources development. Types of projects covered by this program would be navigation, flood control, beach erosion control, hurricane flood protection, and related developments such as water supply and outdoor recreation. Normally, a cost-sharing formula is used whereby the local or state government unit picks up 50% of the project costs. Your first step would be to contact either your U. S. Senator or Representative and request that provision of the desired facilities be considered by the federal government. The request would then proceed through a series of steps including feasibility studies, Corps of Engineers' reports, review, Congressional authorization, etc. Unfortunately, this process usually takes about 8-10 years from application to completion.

The second course of action, and a much simpler one, is covered under a program referred to as "Special Continuing Authorities". The objective of this program is to allow the Corps of Engineers to make a fast response to relatively small problems, such as Hoover Beach. Congressional approval is not needed, as in the above case, and you would contact the District Engineer in Buffalo directly requesting that your project be considered for federal funding. You would appear to be eligible for a Section 103 project ("Small Beach Erosion and Shore Protection Project Authority"). In addition to or in lieu of physical remedial measures such as groins, seawalls, etc., provisions for periodic beach

(Continued Over)

nourishment can be recommended when such a measure can be demonstrated as the best appropriate plan. The Corps would be limited to spending \$1,000,000 on this project. Naturally, there is no guarantee that your application would be accepted as you would be competing against other areas for limited funds. Also, the Corps will first do a reconnaissance report to see if your project is feasible. But, it's certainly worth the effort to try! I would suggest you contact:

Mr. Bob Wade  
U. S. Army Corps of Engineers  
Buffalo District  
1776 Niagara St.  
Buffalo, New York 14207  
716-876-5454

He could answer your questions about either of these funding possibilities and is a good friend of mine.

In reply to your second question concerning the use of a stone picker for cleaning up beach shale, I know of no one who has used that technique. I called around and spoke with several other people in this field and came up empty. Sorry!

I'm enclosing a publication which should answer all your questions about floating tire breakwaters (FTB's). Pages 5-7 will list other areas having successfully used FTB's. The rest of the book will detail the proper design and construction techniques for such a structure. If you should have further questions on FTB's, I would suggest you contact:

Mr. Bruce DeYoung  
Sea Grant Extension Specialist  
N.Y. Sea Grant Extension  
412 East Main Street  
Fredonia, New York 14063  
716-672-2191

He is a leading authority in this field and is the New York Sea Grant "expert" on FTB's.

Thank you for your inquiries and if I can be of further assistance, please contact me.

Sincerely,



Brian E. Doyle  
Sea Grant Extension Specialist

BED/m

cc: Bob Wade ✓  
Bruce DeYoung

(1517-18) [unclear] [unclear]

6-6-79  
Reply 6/20  
Engraving

I feel  
 Haven't  
 Back  
 Qualify  
 Under  
 The

1960 + over 100  
Donald Birch Emerson Nature Protection Report

Please advise me on where we can  
purchase the West-View Edition of "Civilization."

**OTC**

**Checked by:**  
**Signed by:**

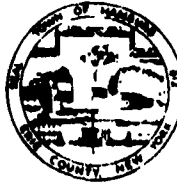
28.11.19

# Town of Hamburg

Supervisor  
LEO J. FALLON

Councilmen  
FRANCIS J. METZ  
PAUL J. SCHLEHR  
FRANK J. WARNES  
BARBARA C. WICKS

Town Clerk  
HENRY O. LEVY



Town Attorney  
WALTER L. ROOTH

Supt. of Highways  
RICHARD A. SMITH

Receiver of Taxes  
ROBERT A. TARD

Town Justice  
NORMAN E. KUSHEL  
THOMAS H. ROBINSKI

S-6100 SOUTH PARK AVENUE HAMBURG, NEW YORK 14075

TEL. (716) 696-1111

April 19, 1979

TO: Rose Sanetz  
119 Mtd Shore  
Hoover Beach

## EMERGENCY ENCLOSURES

(APRIL 6, 1979)

### RITTER

6 sq. ft.	\$4.32
128 sq. ft.	92.16
32 sq. ft.	23.04
16 sq. ft.	11.52
192 sq. ft.	138.24
192 sq. ft.	138.24

\$407.52

320 sq. ft.	247.60
	<u>\$655.12</u>

### CAPPOLA

\$150.00
125.00
125.00
125.00
125.00
160.00
<u>\$685.00</u>

ACTUAL

\$407.10
247.60
<u>\$654.70</u>
685.00

\$ 1339.70

BUFFALO COURIER EXPRESS

APRIL 11, 1979

*Hamburg, Evans*

## Storm-Damaged Areas To Get State Inspection

The possibility of residents of the Town of Evans and the Hoover Beach area of the Town of Hamburg receiving federal disaster assistance to cover storm damages will come a step closer today.

Erie County Executive Edward J. Rutkowski late Tuesday received word from the office of Gov. Hugh Carey that officials will begin inspections of the stricken area this morning.

Rutkowski sent a telegram to the governor on Monday requesting that Carey and the Federal Disaster Assistance Administration (FDAA) arrange for Small Business Administration (SBA) loans for residents of the two areas.

### Heavy damage

Both communities were heavily damaged Friday when a massive wind storm swept through the region.

Once the SBA makes the survey, it will report to Carey and the FDAA.

Rutkowski told The Courier-Express that he is confident that assistance "can come as early as next week."

Rutkowski also said he has directed the county's Community Development office to make the Lake Erie shoreline a Priority One Designated Target Area so that residents there can apply for Community Development Rehabilitation grants and subsidies.

### Inspection Complete

In a related development Tuesday, the Army Corps of Engineers completed an inspection of the Angola Water Works in the Town of Evans and will report findings of the inspection to Rutkowski later this week.

Rutkowski called for the inspection after concern over the ability of the Water Works to survive were expressed. Seven feet of land from around the base of the Water Works was eroded away during the storm.

J. Pieczynski  
A. Andra  
H. Vitale

SUN.-APRIL 8, 1979

# Homes, Hopes Fall Victim To Winds, Ice Mountains

By RICH SCHEININ

Courier-Express Staff Reporter

The winds were already shifting as Bob Brysinski walked along the shore Thursday night in front of his Hoover Beach home.

The smell of fish came up fast and though he could sense a storm was in the making, the clear water gave no indication that within 36 hours he would have no home to return to.

Weather details on Page A-6

Now it was Saturday. The storm was over, but Hoover Beach had been ravaged as never before. And as Brysinski's friends sorted through the rubble in what had once been a living room, searching for his wife Linda's wedding ring, Town of Hamburg officials were adjusting their estimates of damages here upwards to between \$3 million and \$3.5 million.

"Once you can live with it," said Brysinski, whose kitchen wall was smashed by a boulder during a 1975 storm. "You figure it's a once-in-a-lifetime thing. But, jeez, you can't go through this every year. It gets a little sickening after a while."

## Reserve Units Help

As Naval Reserve units in U.S. Army dump trucks tried to make some sense of the scene — mountains of ice pushed up to, beyond and under these homes along Lake Erie; roofs, walls, bicycles and tree limbs everywhere — a similar cleanup was beginning in the resort community of Sunset Bay.

Here, too, a state of emergency was still in effect. About 20 cottages were swept away from their foundations or undermined by raging flood waters Friday. \$100,000 damage inflicted on the popular Mulligan's-On-The-Lake complex. Total damages were estimated at \$1 million for the second time in a month and a half.

*Pieczynski*  
*H. Vitale*

The two communities were reeling. And though about two thirds of 150 Hoover Beach evacuees were back in their homes this morning, and all of Sunset Bay's 200 evacuees returned to their water-logged homes, it would take months of construction and repair to return them to normal.

## Ready to Pull Out

And Bob Brysinski was ready to pull out and find a new home for his wife and 14-month old baby.

Elsewhere in storm-struck Western New York, waters had receded from the homes of some 50 Grand Island families stranded Friday by the rising Niagara River. And in the City of Dunkirk, where flooding caused an estimated \$1 million damage, seven evacuated residents were reportedly back in their homes as work crews put up temporary blockades along the breakwall beside Lake Erie.

In the Town of Evans, several families are still staying with friends or relatives this morning, as their homes dangle over a cliff along the shore in the Lake Bay area.

U.S. Army Corps of Engineers officials visited Evans Saturday and helped return the Angola Waterworks to operation. Today, representatives of Assemblyman Daniel Walsh will visit the cliff-hanging residences, to see what can be done to assure that further erosion does not drop them right into the lake.

## Better Weather Due

A return of the fierce winds which helped erode eight to 10 feet of their front lawn Friday is not expected, however. The U.S. Weather Service predicts a high in the mid-40's today, with a chance of rain or wet snow tonight and Monday.

In Sunset Bay, Town of Hanover fire and police officials continue to assist in the cleanup, with plainclothesmen patrolling the area to prevent pilfering. Erosion is a problem here, too, because of the uprooting of cottonwood trees along the beach.

And in Hoover Beach, the sad drama drags on. Power has been returned by the Niagara Mohawk Power Co. to all but a handful of homes, but the Naval Reserve units, the local fire volunteers and town highway and buildings and grounds employees continue to sort through the confusion.

One hopeful sign was the return to business Saturday of Foit's Seafood Restaurant which was battered with between \$50,000 and \$75,000 in damages.

State Department of Transportation vehicles are on emergency standby status in response to a request by County Executive Edward J. Rutkowski, who visited the community Saturday. Rutkowski, later contacted the Federal Small Business Administration to request a survey of damages to determine if residents and businesses are eligible

for low-interest loans.

Most of the more than 100 families who suffered flooding and water damage have only minimal flood insurance coverage. Hardest hit were the Brysinskis and about a dozen other families whose homes were damaged beyond repair by the gale-force winds which were unofficially clocked here at 90 miles per hour.

## Buried Under Ice

This morning, five heavy duty dump trucks from the county will join in the cleanup effort. But Bob and Linda Brysinski's kitchen — walls, floor, coffee pots, refrigerator, everything — are lying somewhere under tons of ice. And there appears to be little that Erie County's efforts can do about it.

Saturday afternoon, Clara Brysinski — Bob's mother — stood amidst the mud, teddy bears, and splintered furniture that littered the floor of the home she had spent 18 summers in; the home Bob and his new bride winterized at a cost of \$8,000 three years ago.

Clara Brysinski sobbed. "Our house is all gone," she said softly.



NCBED-PF (20 August 1978) 1st Ltr

SUBJECT: Erosion and Shoreline Damage in the Vicinity of Hamburg, New York

DA, Buffalo District, CE, Buffalo, New York 14207

15 September 1978

THRU: Division Engineer, North Central, ATTN: NCBED-T

TO: HQDA (DAEN-CMA-A), WASH DC 20314

1. Draft of reply to Mr. Hayes is enclosed.

2. Mr. Hayes states that the Corps of Engineers cleans the beaches of Long Island and implies that Lake Erie beaches should receive similar treatment. We do not know what cleaning of beaches is done on Long Island, but believe it to be a debris removal program authorized specifically for the Port of New York. In checking with New York District, we were informed that debris removal by the New York Port District does extend into Nassau County on Long Island. If this is the activity referred to by Mr. Hayes, it is specifically authorized for New York Port District only, and similar work could not be done on Lake Erie without Congressional authorization. You may wish to incorporate this supplemental information into your reply to Mr. Hayes. We did not include it in the draft reply because we are not familiar with the authorization, background, or extent of the work.

2 Incl

1. nc

Added

2. Draft ltr

DANIEL D. LUDWIG

Colonel, Corps of Engineers

District Engineer

CF:

NCBED-PF

Sloan\_\_\_\_\_

Pieczynski\_\_\_\_\_

Gilbert\_\_\_\_\_

Hallock/Liddell\_\_\_\_\_

Braun\_\_\_\_\_

Liddell\_\_\_\_\_

DAEN-CWO/SF0343

30 August 1978

SUBJECT: Erosion and Shoreline Damage in the Vicinity of  
Hamburg, New York

District Engineer, Buffalo

1. The attached correspondence is referred for:
  - a. Information as basis for further reply, to reach DAEN-CWA-A not later than 14 September 1978 thru NCD.
  - b. Draft of reply.
2. Copy furnished Division Engineer, North Central.

FOR THE CHIEF OF ENGINEERS:

1 Incl  
Cy ltr fm Mr. J. M. Hayes  
dtd 20 Aug 78 w/att

R. L. JORNS  
Colonel, Corps of Engineers  
Assistant Director of Civil Works,  
Upper Mississippi Basin & Great Lakes

NCBED-PF

14 August 1978

Mr. Joseph M. Hayes  
S 4908 Clifton Parkway  
Hamburg, NY 14075

Dear Mr. Hayes:

This is in reply to your letter dated 22 July 1978 to Major General Richard L. Harris, Division Engineer, North Central, requesting financial assistance in restoring lake shore retaining walls on Lake Erie in the vicinity of Hamburg, New York. General Harris provided the letter to me for response since the erosion problems which you cite are within my area of jurisdiction.

Damages to the beachwalls which you described have occurred at many locations along the coasts of Lakes Erie and Ontario. We have unfortunately experienced a period of high levels on the Great Lakes which have contributed to the erosive effect of storms. Hopefully, the lakes are now returning to more normal levels.

The Corps of Engineers has no authority to provide financial assistance to private property owners with shoreline erosion problems. I know of no other Federal programs that provide such assistance.

I regret that I cannot be of assistance.

Sincerely yours,

1 Incl  
"Help Yourself" Brochure

DANIEL D. LUDWIG  
Colonel, Corps of Engineers  
District Engineer

CF:  
/NCBED-PF

Sloan \_\_\_\_\_  
Wade \_\_\_\_\_  
Gilbert \_\_\_\_\_  
Hallock/ \_\_\_\_\_  
Liddell \_\_\_\_\_  
Braun \_\_\_\_\_  
Ludwig \_\_\_\_\_



NCED C

DEPARTMENT OF THE ARMY  
NORTH CENTRAL DIVISION, CORPS OF ENGINEERS  
536 SOUTH CLARK STREET  
CHICAGO, ILLINOIS 60605

*draft sent 8/8/78*

02 AUG 78

Mr. Joseph M. Hayes  
S 4908 Clifton Parkway  
Hamburg, New York 14075

Dear Mr. Hayes:

Thank you for your letter of 22 July 1978, regarding erosion and shoreline damage in the vicinity of Hamburg, New York. By copy of this correspondence, I am referring your letter to Colonel Ludwig, Buffalo District Engineer, as a site specific matter pertaining to his area of jurisdiction.

Sincerely yours,

Original Signed

RICHARD L. HARRIS  
Major General, USA  
Division Engineer

copy furnished:

✓ District Engineer, Buffalo

[ Dear General W. L. Linn 8/20/78 ]

I am terribly sorry to trouble  
you, but I will, in due course  
try to be as brief as possible, -  
you may be able to find some  
funds, left from your present budget  
to at least make a concerned -  
+ a dutiful effort to clean up  
the scum-like looking debris that  
is strewn along a few miles  
of the American side of Lake Erie  
from Hoover Beach to Waukegan in  
and located within the border  
[ of the Township of Hamburg N.Y. ]  
I am very well aware of the

2

fact, that U.S. Army Corps Engineers  
clean the beaches of Long Island N.Y.  
well what is hoping to put across  
to you sir, is, why can you put  
your best foot forward, and get rid  
of the mess we had suffer from  
4 storms, over the past three years  
or so. i going to keep on pressing  
the federal bureaucracy in Washington D.C.  
till the persons do some earthly  
good for their fabulous salaries, i  
thank you, good health & good luck  
to you sir & yours

Sincerely Yours

Wm. Lloyd Garrison

14408 Clinton Parkway

Hamburg, N.Y. 14075

DAEN-CWO-E

8 SEP 1978

Mr. Joseph M. Hayes  
54908 Clifton Parkway  
Hamburg, New York 14075

Dear Mr. Hayes:

On behalf of Mrs. Carter, I am replying further to your letter of 18 July 1978 regarding financial assistance in restoring lakeshore retaining walls on Lake Erie in the vicinity of Hamburg, New York.

By now you have received a reply from our Buffalo District Engineer, Colonel Daniel D. Ludwig, dated 14 August 1978, replying to a similar letter you sent to Major General Richard L. Harris, the North Central Division Engineer.

It is regrettable that we cannot provide you any assistance as has been stated in Colonel Ludwig's letter. The authority delegated to the U.S. Army Corps of Engineers by Congress is very specific in these matters and we presently do not have the authority to provide financial assistance to private property owners with shoreline erosion problems.

Sincerely,

CHARLES I. MCGINNIS  
Major General, USA  
Director of Civil Works

CF: Division Engineer, North Central  
District Engineer, Buffalo



DEPARTMENT OF THE ARMY  
BUFFALO DISTRICT, CORPS OF ENGINEERS  
1776 NIAGARA STREET  
BUFFALO, NEW YORK 14207

NCBED-PF

14 August 1978

Mr. Joseph M. Hayes  
S 4908 Clifton Parkway  
Hamburg, NY 14075

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I regret that I cannot be of assistance.

Sincerely yours,

1 Incl  
"Help Yourself" Brochure

*Daniel D. Ludwig*  
DANIEL D. LUDWIG  
Colonel, Corps of Engineers  
District Engineer





DEPARTMENT OF THE ARMY  
NORTH CENTRAL DIVISION, CORPS OF ENGINEERS  
536 SOUTH CLARK STREET  
CHICAGO, ILLINOIS 60605

NCDED-C

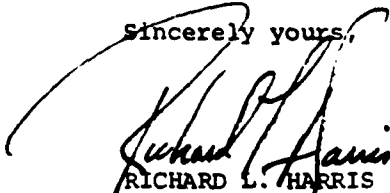
0 2 AUG 1975

Mr. Joseph M. Hayes  
S 4908 Clifton Parkway  
Hamburg, New York 14075

Dear Mr. Hayes:

Thank you for your letter of 22 July 1978, regarding erosion and shoreline damage in the vicinity of Hamburg, New York. By copy of this correspondence, I am referring your letter to Colonel Ludwig, Buffalo District Engineer, as a site specific matter pertaining to his area of jurisdiction.

Sincerely yours,

  
RICHARD L. HARRIS  
Major General, USA  
Division Engineer

copy furnished:  
District Engineer, Buffalo

Dear General Harris: July 24, 1975

I am writing you of a seawall problem that we have at Hamburg N.Y. that borders Lake Erie shoreline. I will go to state that these seawalls were damaged over a period of 3 years by the storm of Nov 1975, the ice storm of Jan 1976 and the storm of the blizzard of 1977 well during those three years my sister finally crumble to the beach 31 ft below that her seawall which was 1 foot in thickness, ill say she's lost about 39 tons and the ground water and the powerful winds off the Lake is claiming more of her land, and she may lose her home, to the sea, other walls have also crumble also, and I shall be thankful to the Lord, that nobody

2.  
I have written, & they are on those  
beaches below those beachside  
written to Ray Marshall, Donald Kees,  
Patricia Harris & Cecil Anderson about  
those walls over the past several  
months, but it is tough to get a  
grant from the US Govt to fix  
these properties, we even written to  
President Carter wife Rosalyn Carter  
we have back. President Carter  
back when he won / primaries in  
April of 1976, and I have on different  
occasions written to him, and I did  
received letters in return, on various  
issues, I know that if a Government  
grant is issued for the replacement  
repair of these walls, alot of the  
danger to children and women.

3.

would be needed, and safe for  
all time from River Beach to  
Lukerew, in the Town of Hamburg, <sup>NY</sup>  
a stretch of 4 miles, that Grant Van  
Horn, should not cost very much.  
to the Federal Govt, and this project  
is a very necessary project, and it  
has to be started and completed to  
the finish, I am a U.S. Merchant  
Seaman, have been on ships of the  
Great Lakes over the years, but  
haven't sailed since Nov 16 1974  
and I have also ~~seen~~ <sup>some</sup> in the  
U.S. Army during the world war II  
and I am on the eligible list  
for the U.S. Corps of Engineers --

11  
Buffalo, N.Y. I am working on  
the Upper Niagara dam, for a short  
time in 1869. I am now preparing  
to go home night, I am on the  
last for a week and a half for  
boats & things. I would also like if  
could get a warehouseman job in  
their new warehouse at 1776 Niagara  
Buffalo N.Y. but there are to get  
as the Buffalo District Engineer  
Ludwig has told me recently in a  
letter, I hope to hear from you  
soon, and good luck at your new  
job. Thank you very much.

Sincerely

Wm. C. H. H. H.  
H. H. H. H. H.  
H. H. H. H. H.

NCBED-PF

19 January 1978

Edward J. Rutkowski, District Representative  
Office of Honorable Jack Kemp  
1101 Federal Building  
111 West Huron Street  
Buffalo, NY 14202

Dear Mr. Rutkowski:

This is in reply to your note requesting information on Federal assistance with erosion and flood problems at Hoak's Restaurant, Lakeshore Road, Hamburg, New York.

There is currently no Federal program to provide technical or financial assistance to private property owners with erosion and flooding problems along the lake shore. However, my staff can provide limited technical advise on the nature of protective works. Enclosed is a "Help Yourself" pamphlet that we provide people that have shore protection problems.

A Department of the Army permit and a New York State Department of Environmental Conservation permit will be required prior to the start of construction. Generally, if the structure is constructed at or above the mean high water elevation (572.8 I.G.L.D.), no Department of the Army permit is required. A member of my staff has contacted Mr. Hoak and discussed our regulatory responsibility with him. Application forms were left with Mr. Hoak.

A building permit from the town may also be required. There is no criteria for the distance a structure may extend into the lake, however, an application for a Corps permit is subjected to a full public interest review. Extensive encroachment may receive adverse comments.

I suggest that Mr. Hoak hire a competent engineering firm to design the protective structure because the wave action and ice conditions can be very destructive in this area. An improperly designed structure may be unable to withstand these forces and therefore not provide the required protection.

1a/2146

NCED-PY

Edward J. Rutkowski, District Representative

I trust this information will meet your current needs. If there are any further questions concerning this matter please contact me at 876-5454.

Sincerely yours,

1 Incl  
as stated

DANIEL D. LUDWIG  
Colonel, Corps of Engineers  
District Engineer

CF:  
HQDA (DAEM-CMA-D) w/insug corres.  
NCED " "  
XD " "  
PAO " "  
NCSCC-S " "  
NCED-PY

Sloan \_\_\_\_\_

Pieczynski \_\_\_\_\_

Gaume \_\_\_\_\_

Baldi/  
Gilbert \_\_\_\_\_

Hallock/  
Liddell \_\_\_\_\_

Braun \_\_\_\_\_

Ludwig \_\_\_\_\_

HOUSE OF REPRESENTATIVES, U.S.  
WASHINGTON, D.C.

EDWARD J. RUTKOWSKI

January 11, 1977

DISTRICT REPRESENTATIVE TO  
REP. JACK KEMP  
BUFFALO DISTRICT, NEW YORK

1101 FEDERAL BUILDING  
111 WEST HURON STREET  
BUFFALO, NEW YORK 14202  
AREA CODE 716 846-4126

846-4123/846-4126

Respectfully referred to

Dear Dan —  
... could you please  
respond to Mr. Noak's  
questions?

PLEASE RESPOND TO THE BUFFALO  
DISTRICT OFFICE  
111 West Huron Street 14202

many thanks!

Very respectfully,

EJ Rutkowski

38<sup>th</sup>  
District.



Hook's Restaurant, Inc.  
5400 Lakeshore Road  
Hamburg, New York 14075

Dec. 15, 1977

RECEIVED DEC 2 1977

Congressman Jack Kemp  
3592 S. Cumberland  
Hamburg, N.Y. 14075

Dear Congressman Kemp,

On September 6, 1977, Michael Hook and I, Edward Hook, became the new owners of Hook's Restaurant. As you know, Hook's has long been a popular eating and drinking establishment on the Lakeshore. We are proud to be the new owners and we hope to continue the fine tradition that our family has maintained for the past twenty eight years. There is a problem, however, which concerns us.

Over the years, the level of Lake Erie has risen considerably, causing much damage to the building and its contents. On November 10, 1975 very high winds were responsible for the destruction of many homes in the Hooper Beach Development because of the high water level. This development is about  $\frac{1}{2}$  mile from our restaurant. Hook's damage amounted to

approximately (\$12,000) (twelve thousand dollars). Each year the winter causes damage in the area. For these reasons, we are very interested in constructing a wall behind our building. We would like to be assured of continuing our business.

We hope that you will be able to answer the following questions for us:

- ① Can the State or Federal Gov't advise or assist us in any manner?
- ② Are there any State or Federal loans available for this type of project?
- ③ Which agencies must we contact before construction begins? (Corps of Engineers, Conservation Dept.)
- ④ How far away from the building into the lake are we allowed to build?

We would like to begin construction sometime in the Spring of 1978, hoping that we can operate until then without suffering any great damage.

Thank you for listening.  
We would appreciate any information or help which you

(3)

might be able to give us. Please  
continue working so diligently for  
federal and state tax cuts. Many  
people are very aware of your  
constant effort and hard work.

Sincerely,  
Michael J. Hoak  
Edward J. Hoak

NCBEL-PF

21 September 1976

Mr. Edward D. Rebmann, Jr.  
V. P. Hoover Beach, Inc.  
245 S. Shore Drive  
Blasdell, NY 14219

Dear Mr. Rebmann:

Thank you for your letter dated 2 September 1976 regarding the problems Riparian shoreline owners are experiencing from the record high lake levels of Lake Erie. In the short time that I have been District Engineer, I have seen much of and have become fully aware of the plight of lake shore residents. As you indicated, this is a priority problem, and I am working with other authorities to help minimize shoreline erosion while we seek a solution. The most obvious solution is to develop a means for limiting high water levels on the Great Lakes. The attainment of such a capability, however, is not a routine matter. Much time and effort has already been devoted to this issue, and I am inclosing a copy of the recent International Joint Commission report which may help to explain the various elements which contribute to its complexity. Currently, we are releasing flows through the St. Lawrence River at rates higher than normal to lower Lake Ontario as much as possible by the end of the year, but we do not have a similar control capability on Lake Erie. Hopefully, we will experience lower water supplies in 1977 and all of the lakes will return to more normal levels.

As you know, members of my staff have met with you and several of the residents of your area to discuss possible mitigation measures (both public and private) for the prevention of erosion damage in the Hoover Beach area. Unfortunately, the Corps of Engineers does not have the authority to commit public funds for erosion protection measures for

NCBED-PF

Mr. Edward D. Rehnman, Jr.

fts/2145

private property. However, I can provide limited technical assistance which would consist of review and comment on any proposed improvement a Governmental agency might consider. If you should require this type of assistance, please do not hesitate to call upon me or my staff.

Sincerely yours,

Incl  
as stated

DANIEL D. LUDWIG  
Colonel, Corps of Engineers  
District Engineer

CF:  
✓ NCBED-PF

Lombardo \_\_\_\_\_  
Piecynski \_\_\_\_\_  
Gilbert \_\_\_\_\_  
Hallock \_\_\_\_\_  
Walker \_\_\_\_\_  
Ludwig \_\_\_\_\_

sy/233

NCED-PS

2 January 1976

Edward V. Ragan, County Executive  
County of Erie  
95 Franklin Street  
Buffalo, NY 14202

Dear Mr. Ragan:

This is in reply to your letter dated 12 December 1975 regarding flood protection of the lakefront area of Hoover Beach, NY.

I am aware of the problem at Hoover Beach and we have made several field investigations and attended numerous meetings with the residents of the area. Although the flood damages this area sustained as a result of the November 1975 storm were significant, I cannot economically justify a Corps project to protect the area from flooding because of the infrequency of damages caused by flooding. Based on my evaluation of the situation and the existing policies of the Corps of Engineers, I have determined that the only support I can provide in this matter is technical assistance. This technical assistance would be limited to a review of improvements proposed to be constructed by non-Federal interests.

I suggest that Erie County arrange a meeting to include representatives of my staff, your staff, and the NYS Department of Transportation (NYSDOT) to discuss the proposed placement of any revetment material that NYSDOT may have to alleviate erosion and flooding conditions in the Hoover Beach area. Please have your staff contact Mr. Donald Liddell (876-5434), my Chief of Engineering Division, to establish a mutually acceptable time, date, and place for the meeting.

Sincerely yours,

CF:  
NCED-D  
✓ NCED-PS  
Mr. Edward Rich  
NYSDOT  
50 Wolf Road  
Albany, NY 12233

BERNARD C. HUGHES  
Colonel, Corps of Engineers  
District Engineer

Lombardo \_\_\_\_\_  
Gilbert \_\_\_\_\_  
Foley \_\_\_\_\_  
Mallard \_\_\_\_\_  
Liddell \_\_\_\_\_  
Walker \_\_\_\_\_  
Hughes \_\_\_\_\_



## County of Erie

EDWARD V. REGAN  
COUNTY EXECUTIVE

December 12, 1975

PHONE-716-846-88

Colonel Bernard Hughes, District Engineer  
Corps of Engineers  
1776 Niagara Street  
Buffalo, New York 14207

Dear Colonel Hughes:

On November 10, 1975 a severe lake storm caused extensive damage to property along the western shore of Lake Erie in Erie County. We have had requests from citizens of this area to seek measures to control future flooding.

In the past we have placed large rocks along certain areas of the lakefront in an attempt to protect areas such as Hoover Beach from storm damage. This proved insufficient in the most recent storm.

We have had discussions with the State Department of Transportation relative to the possible placement of additional rock, however, there seems to be general agreement that before any additional work is undertaken, some sort of study be done as to what the best measures would be if any. I would request at this time that the Corps of Engineers undertake such a study in order to determine how to proceed. I would also be hopeful that at the conclusion of such a study the Corps would be able to finance whatever flood prevention system is required.

Very truly yours,

EDWARD V. REGAN  
County Executive

EVR/HS/bs

cc: Honorable Jack Kemp  
Member of Congress



## Locksley Park Taxpayers

## Lake Shore Civic Association

39 Exeter Terrace

Phone 627-7921

Hamburg, New York 14075

November 28, 1975.

The Honorable Jack F. Kemp,  
House of Representatives,  
132 Cannon House Office Bldg.,  
Washington, D. C. 20510

Dear Congressman Kemp:

Re: Hoover Beach Flooding

Mr. Rutkowski of your office was at the scene of this flood area and probably told you of the extensive damage and disruption suffered by the residents of Hoover Beach.

As neighbors of these unfortunate people we wonder if there is anything the Federal Government can do to prevent further damage to their homes.

Is it possible that some money or material could be transferred from the Bird Island Pier project in the Niagara River to help Hoover Beach? A recent newspaper article indicated \$200,000.00 would be spent on Bird Island but the Army Engineers would not recommend using the pier upon completion.

Thank you for your assistance.

Very truly yours,

LOCKSLEY PARK TAXPAYERS  
LAKE SHORE CIVIC ASSOCIATION

By *Laura A. Dold*  
Laura A. Dold, Corresponding Sec.

CC: Edward Rutkowski,  
1101 Federal Bldg.,  
111 West Huron St.,  
Buffalo, N.Y. 14203  
  
District Engineer,  
U.S. Army Corps of Engineers,  
1776 Niagara St.,  
Buffalo, N.Y. 14207



## Corps to Make Pier Safer

The U. S. Corps of Engineers said Wednesday it will spend \$200,000 to make the Bird Island channel pier safer for fishermen.

Col. Bernard C. Hughes, district engineer, promised that before he leaves the district, the corps will improve the walkway atop the pier and install safety railings.

He still cautioned that "anyone's a fool" to go on the pier in high water.

MUCHES

After waging a losing battle for 150 years, the Army Corps of Engineers is about to hoist the white flag of surrender over the Bird Island Pier.

Instead of continuing its unsuccessful efforts to keep local fishermen away from the popular but highly dangerous spot, the corps plans to install safety railings, hopefully in about 18 months, to keep fishermen from being swept in to the drink by the choppy waters of the Niagara River.

"That pier is off limits to the public but we've failed miserably to keep people off," Col. Bernard C. Hughes, the corps' district engineer, said Wednesday night. "That's why we've decided to make it safer."

### Warnings Fall

Hughes noted that warning signs, fences and gates have

failed to keep fishermen, two of whom were drowned last year, off the pier, which separates the river from the Black Rock Canal.

"If I put a guard with a shotgun out there 24 hours a day I still couldn't keep people off," he added.

The pier safety project, estimated to cost about \$200,000, is part of a \$4.8 million recreation plan that the corps has developed for the waterfront area and for Cazenovia Creek in West Seneca.

The package met with general acceptance during a public meeting at the Buffalo Museum of Science Wednesday night.

### Safety Project

However, Hughes stressed that because the corps is not in the recreation business, others, most likely the City of Buffalo

# Army Surrenders Over Bird Island

and Erie County, will have to implement the plans.

The pier work, Hughes said, is an exception because the corps can undertake safety projects that can be considered routine maintenance.

Hughes said that one of the major advantages of the plan is that most of the projects are eligible for 50 per cent federal aid from the Bureau of Outdoor Recreation (BOR). The other 50 per cent would be provided by local governments.

Bernard C. Pagan, a BOR planner, generally endorsed the plan, noting that his agency favors water-related projects.

Besides the pier project, the plan calls for things as a pedestrian overpass across the State Thruway at Vulcan St. to connect Riverside Park with the river front, a series of bicycle paths to link the various parks

along the river and rehabilitation of the dike and expansion of the small boat harbor.

### Paths Proposed

Bike paths are also proposed along Delaware Park Lake and Seneca Creek and both bike paths and hiking and nature trails are envisioned along Cazenovia Creek.

Among those supporting the plan was Mrs. Irene K. Gardner, chairman of the Buffalo and Erie County Urban Waterfront Advisory Committee, who nevertheless expressed the fear that like so many other plans this one may never be implemented.

"This plan is just a lot of good common sense. We are talking about things that can get done if the community gets behind it," Hughes said. "It is also an opportunity to do nothing," he conceded.

11-17-75  
JEWES

# Storm-Ravaged Hoover Beach Is Disaster Area

What was a bad storm to many residents of the Lake Erie shore proved Tuesday to have been a disaster for Hamburg's Hoover Beach community. While no damage estimates were available, it became apparent in Tuesday's sunshine

Picture on Picture Page  
Related Story on Page 9

that half of the 106 homes at Hoover Beach had been damaged by wind-whipped waves on Monday afternoon and evening. About 10 were ravaged beyond repair.

Jess McDonald of 249 South Shore Dr., one of the few residents who had refused to evacu-

ate on Monday night, figures he was one of the luckier residents even though his basement wall had collapsed and his furnace had washed away.

## Plans to Stay

"It's probably over at Crystal Beach by now," he said, speculating on the whereabouts of his missing furnace and boiler.

Like some of the other homeowners, McDonald, who is retired, was already rebuilding and planning to stay.

John Blaszkow of 233 South Shore Dr. attempted to clean his living room with a garden rake as he described how waves

had pushed in a large picture window overlooking the lake and swept unhampered through his home. He too will stay.

## Many Sightseers

Along the beach, residents were comparing damage, marveling that some homes had been saved by protective concrete walls, and praising the volunteer firemen who helped them evacuate and then returned to help clean up. Many, however, were annoyed with the sightseers who flocked to the disaster scene on Tuesday.

James F. Casey, disaster director for the Buffalo Chapter of the American Red Cross,

reported that four families from Hoover Beach had been sheltered overnight in area hotels.

## More Bad Weather

Another 200 persons spent part of Monday evening in the Woodlawn Fire Hall but most of them later returned to their homes or moved in with relatives.

Meanwhile, the National Weather Service predicted that the lakeshore may be in for more bad weather.

Rain is expected today, accompanied by gusty southerly winds of 15 to 25 m.p.h. that could become "possibly much stronger" tonight.

Mrs. Anna Gardon, 74, of 93

# Many Storm-Damaged Homes Lack Insurance

homes have "quite serious damage," in most instances amounting to thousands of dollars.

While he had no figures, Rebmann said many of the homeowners had flood insurance and many others did not.

In addition, Rebmann said, many of those with flood insurance did not have enough to cover the full damage.

Rebmann said most of the damage in the community appeared to be water damage that would be covered only by the special flood insurance.

## Federal Subsidy

The area was made eligible for the federally subsidized flood insurance in 1973. Rebmann said homeowners who had not purchased the insurance apparently did not feel they could afford it.

"Even a minimal amount, say costing \$25, is too much for,

some people, because it comes due every year," Rebmann said.

In calling for the county and state to join in building barriers to the lake waters, Rebmann said, "We're not asking for much — some bulldozer work and rubble (riprap) placement."

He said town officials had indicated they would cooperate but do not have the resources to undertake the project on their own.

## Carey's Office Called

On Tuesday, State Sen. James D. Griffin, D-Buffalo, telephoned Gov. Hugh L. Carey's office in Albany and urged that the governor grant assistance to the area.

Griffin said aides promised to discuss the request with the governor and get back to him with a response.

In other Western New York areas suffering water damage

# Is Disaster Area

Kelburn St., died in Mercy Hospital on Tuesday of injuries suffered when she was blown from a second-story porch at her home during Monday evening's storm. She suffered head in-



juries, a broken right arm, broken right leg and rib fractures.

Meanwhile, Matthew J. Carroll, marine division manager for the Niagara Frontier Transportation Authority, reported storm damage at both the Port of Buffalo and the Small Boat Harbor.

Carroll said that docks and catwalks at the Small Boat Harbor, were damaged badly.

At the Buffalo Yacht Club, a 33-foot yacht that sunk during the storm was being raised Tuesday afternoon. Three other yachts that had been damaged were moved earlier in the day.

The twin masted yawl, Endeavor owned by Robert Fisher Jr. sunk in its mooring slip.

James M. Rhoads, past Yacht Club commander, said no estimate of the monetary damage to the boats could be made on Tuesday.

A steel barge owned by Nelson Oldman, a past commodore of the club, broke loose from its moorings at the channel entrance to the club and was hurled up on the club's boat railway, Rhoads said.

In Ontario, Port Colborne Mayor John Buscarino declared the city a disaster area. He estimated damage at more than \$1 million. Cottages in the lake-side canal city crumbled and at least two of them fell into Lake Erie west of the city.

NOV 1975 - COUNTR EXPRESS

JACK KEMP  
30th DIST. CT, NEW YORK

COMMITTEE:  
APPROPRIATIONS

ASSISTANTIVE ASSISTANT:  
RANDAL TEAGUE

EXECUTIVE ASSISTANTS:  
LOU ROTTENMAN  
LOUISE BUCHANAN

**Congress of the United States**  
**House of Representatives**  
**Washington, D.C. 20515**

September 5, 1975

WASHINGTON OFFICE:  
THE CARRER HOUSE OFFICE BUILDING  
AREA CODE 202: 225-2226

DISTRICT OFFICE:  
1101 FEDERAL BUILDING  
111 WEST MURPHY STREET  
BUFFALO, NEW YORK 14202  
AREA CODE 716: 842-4876

DISTRICT REPRESENTATIVE:  
ED RUTKOWSKI

Col. Bernard C. Hughes  
District Director  
U. S. Army Corps of Engineers  
1776 Niagara Blvd.  
Buffalo, New York 14207

Dear Colonel:

I want to thank you for your cooperation this week in moving very rapidly toward a specific plan of action for flood control protection along Scaquada Creek.

The Labor Day weekend rains brought to our immediate attention the status of incomplete projects throughout the area. We would not be nearly as far along today in the completion of projects were it not for the efforts of you and your staff. I will be always grateful for them. Its nonetheless difficult to explain the procedural requirements of a Corps project to a family standing waist deep in their basement.

I received a letter yesterday from a resident in the Hoover Beach area, regarding a problem not associated with our prior efforts to control beach erosion. I am enclosing a copy of that letter.

Although I gather from her letter that the Corps indicated to her the problem was remedial only through action of the Congress, I need specific advice from you as to what needs to be done. Does a study need to be authorized, reauthorized or amended? Given the nature of the situation, can a debris removal effort resolve the flooding arising from backup of the water? Might it be more rapidly done through the State or County? Does private ownership affect the status of what can be done?

I would appreciate your advice on this matter.

Sincerely yours,

  
Jack Kemp

JK:rt  
Enc.

Sept 1 - 1970  
159. Mid-Shore Dr  
Bayview, N.Y.  
Blasdell, N.Y. 1421,

Dear Mr Kemp.

We are a resident of Hoover Beach, and  
live at 159 Mid-Shore Dr.

We are confronted with a very serious  
situation, and were asked to write you, so that  
you could investigate and intervene for us  
in this matter, and turn it over to proper  
departments for solution.

There is a water canal or channel or a stream  
running west into the lake creating an extreme  
danger to properties on both side of it leading  
from Hoover Road.

It has been for years maintained by said owner  
but it's getting so bad now that all sand bags, and  
fill gets washed away because its water way is  
widening itself with pressure and building a sea  
bed higher & higher causing water to rise over  
its bank into the road, flooding basements of  
Lakes Property also Mrs McQuire.

The Corps of Engineers suggested to me, to refer  
this matter, to you so that you could present

this to the Congress and insist for them  
to pass a bill for Remedial study of this  
stream, eroding private land.

Let me hear from you, as I am  
rest anxious about finding an immediate  
solution in this serious matter,

I'm sure you will act sincerely and  
represent us taxpayers in every respect

Sincerely

Remain

Charlotte Lakes

Property Owner of

159. Mid. Shore Dr

Bayview New York

1421

Harver Beach Incorporated

need laws C&S for flood control =  
Sewer no good  
202 flood control no good

James  
Main  
B-6

11/1/51  
Tech. assist

get over camera

